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# **Preface**

This report is an output of the Global EbA Fund, which is implemented jointly by the UN Environment Programme (UNEP) and the International Union for Conservation of Nature (IUCN). The publication was made possible through the generous contribution of the International Climate Initiative (IKI) under the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV).

Founded in 2010 by UNEP, the Global Adaptation Network (GAN) is a global platform for the dissemination and exchange of knowledge on adaptation to climate change. An umbrella organisation active in most continents, GAN is made up of various regional networks and partners that provide knowledge dissemination services in their respective regions. Through its partners, GAN bridges the local and global levels.

GAN disseminates climate adaptation knowledge through the organisation of conferences, funding opportunities, webinars, peer-to-peer learning exchanges, collecting evidence and case studies, supporting partnerships between universities and city officials, and more.

In particular, GAN strives to advance the practice ecosystem-based adaptation (EbA), an approach that uses biodiversity and ecosystem services as part of an overall adaptation strategy to help people and communities adapt to the adverse effects of climate change. A key part of this work is the implementation of the new Global EbA Fund. Launched in March 2021 and funded by IKI, the fund is a quickly deployable mechanism for supporting innovative approaches to EbA. More specifically, GAN, in partnership with the Fund's implementing partner IUCN, brings together global and regional adaptation networks in Africa, Asia-Pacific, and Latin America and the Caribbean (LAC)

to raise awareness of the Global EbA Fund and help identify and overcome barriers to scaling up EbA across different sectoral groups.

GAN conducted a stakeholder dialogue process from March to October 2021, via a combination of an online survey and several regional dialogues, all focusing on overcoming key barriers for upscaling EbA.

Through this participatory process, GAN's regional networks were mobilized, and in total, more than 120 practitioners and experts responded to the survey, and more than 500 people participated in the various dialogues. The survey and some dialogues were available in English, French and Spanish.

This report aims to provide an overview of the main findings and conclusions of this process, with a focus on the main characteristics of EbA initiatives and the barriers preventing their adoption, implementation and upscaling, both globally and in three specific regions: Africa, Asia and the Pacific, and Latin America and the Caribbean.

The report is therefore divided into four main sections, with one focusing on the global level, and three regionspecific sections with information tailored to different regional contexts. It is intended for EbA practitioners and experts, policymakers, investors, and other interested actors that wish to learn more about EbA and the ways in which EbA can be more effectively implemented and scaled up.

Furthermore, this report contributed to a comprehensive study on EbA barriers produced by UNEP for the Global EbA Fund, titled <u>Harnessing Nature to Build Climate</u> Resilience: Scaling Up the Use of Ecosystem-based Adaptation.

# Barriers to the use and scaling up of EbA

This report provides detailed information on the barriers to EbA. But what is meant by 'barriers'?

There is little doubt there is an imperative need to respond to the growing challenges posed by climate change. This involves increasing the resilience of societies worldwide and prioritising action on adaptation, including EbA approaches. However, despite the crucial need and noted benefits of adaptation actions, several barriers exist, namely related to understanding, planning, and investment. These are hindering the wider uptake and scaling up of adaptation approaches, including EbA.

The three main categories of barriers raised during these discussions and in the survey, and therefore in this report, have been identified by the Global Commission on Adaptation (GCA). They can be summarized as follows:

- Lack of awareness of the critical role of natural assets in underpinning resilience, and limited availability of knowledge and evidence to help make the case for working with nature.
- Policy and regulatory environments and governance challenges that influence the attractiveness and feasibility of using these approaches.
- 3. Limited access to finance for applying and scaling up nature-based approaches.

These correspond to the three main (consolidated) categories used during the dialogues and initially during the broader stakeholder consultation process: 1) knowledge and awareness; 2) regulatory environments; and 3) financial barriers. After an extensive review of past literature and research, 30 barriers were identified. These 30 total barriers were then divided into 10 subcategories, all of which fall into one of the three main categories.

#### The 10 subcategories are:

- 1. Knowledge barriers and uncertainties
- 2. Awareness and behavioural barriers
- 3. Social and cultural constraints
- 4. Capacity gaps
- 5. Institutional and governance challenge
- 6. Finance barriers
- Partnership and stakeholder engagement challenges
- 8. Land tenure, property ownership and space barriers
- 9. Physical constraints
- 10. Scale issues

## **Technical information**

This report includes many percentages and numbers, reflecting the results from the overall process.

Therefore, this section provides an explanation of these different types of figures, and how they were calculated.

# Methodology

#### 1. Aim and approach

This report aims to provide an overview of the main findings and conclusions of the regional stakeholder dialogue process conducted from March to October 2021, which consisted of an online survey on EbA barriers and several regional dialogues. The online survey was open for responses from June until October 2021.

#### 2. Survey data collection and analysis

The quantitative results in this report are based on the data obtained from the survey. Overall, 108 survey responses were received, with 61 responses submitted from the Africa region, 30 from the Asia-Pacific region, and 17 from the LAC region. The survey consisted of a series of questions involving the respondents' organisations, initiatives and the EbA barriers they have been facing, as well as the activities that could help overcome said barriers.

When ranking the different barriers, the respondents were able to choose between five different levels of importance: very important, important, moderately important, slightly important and not important. To calculate the different percentages and rank the barriers considering the respondent's answers, a coefficient was allocated to each of these categories, with:

Very important: 1

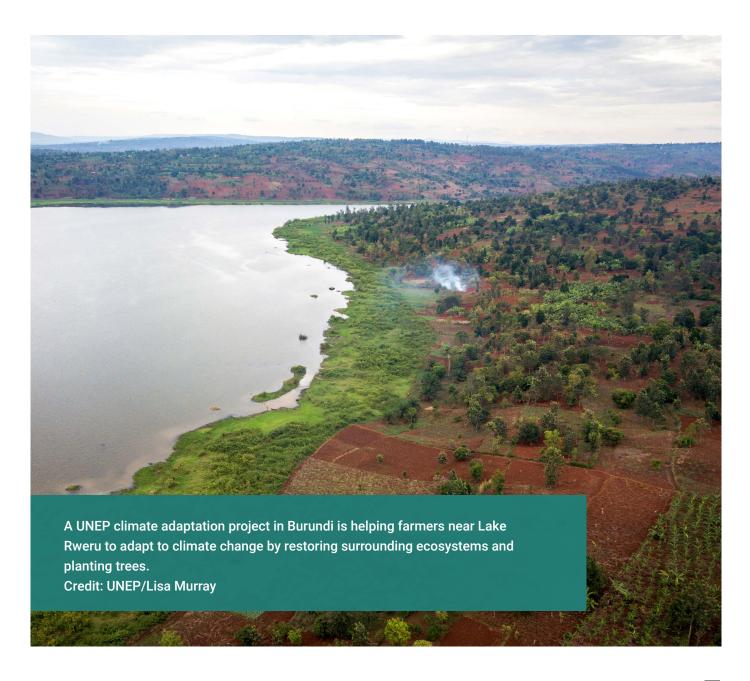
• Important: 0.75

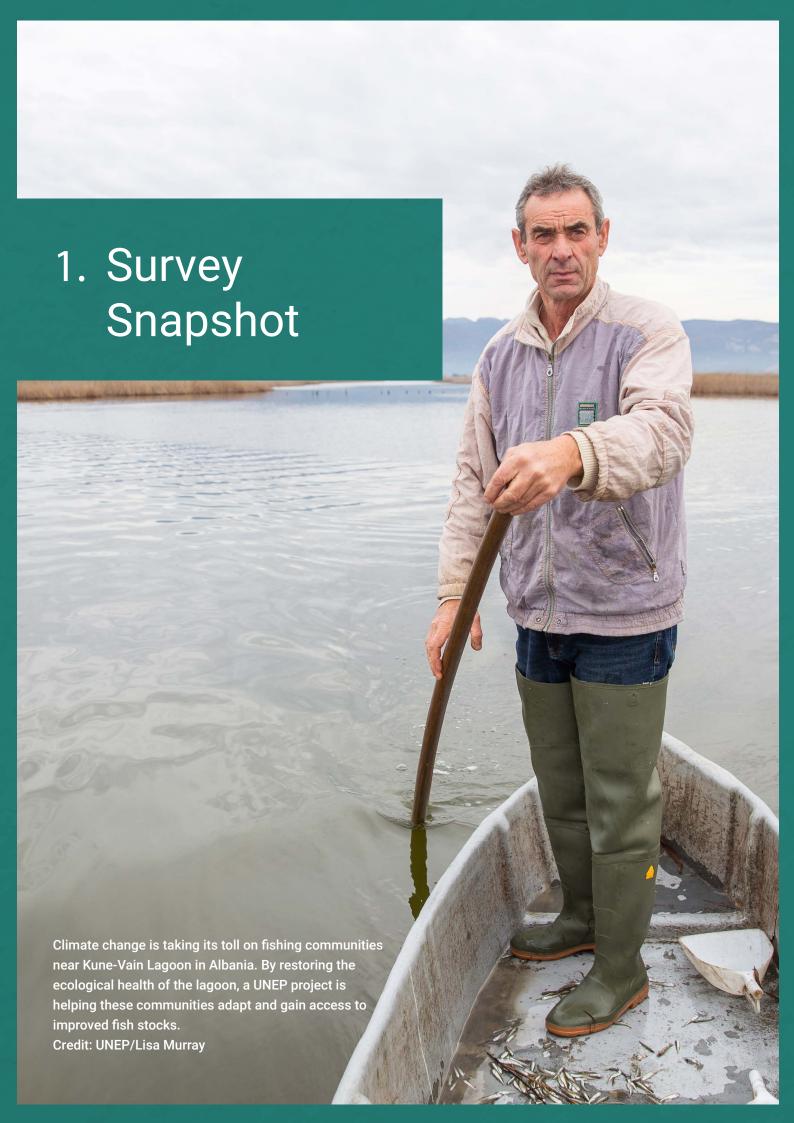
· Moderately important: 0.5

· Slightly important: 0.25

• Not important: -1

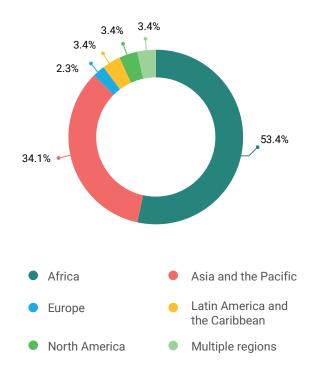
This coefficient system allowed for analysis of all different answers, leading to a ranking that reflects the views shared by the practitioners and experts who took the survey.





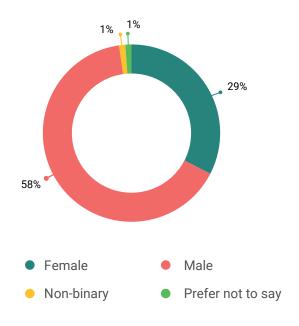
This section provides a global overview of the results from the survey. Note that the samples from different regions are of different sizes, and therefore some results might be more representative of the specific contexts of Africa, from which the largest number of responses came.

Figure 1.1 Project location



Out of the 108 survey responses, 53.4 per cent of project activities take place in Africa and 34.1 per cent in Asia-Pacific. Only 3.4 per cent of activities take place in LAC, 3.4 per cent in North America and 2.3 per cent in Europe. Another 3.4 per cent of projects take place in more than one region.

Figure 1.2 Survey respondents' gender



Out of the 108 respondents, 58 per cent identified as male, 29 per cent as female, 1 per cent as non-binary, and 1 per cent of respondents wished to not reveal their gender. More research is needed to determine reasons for the low participation of women in this survey.

Figure 1.3 Type of organisations represented

Of the respondents, 26 per cent belong to a local nongovernmental organisation (NGO), other organisations (20 per cent, including academics, researchers, national NGOs and others), international NGOs (9 per cent), research centres (7 per cent) and government ministries (7 per cent).

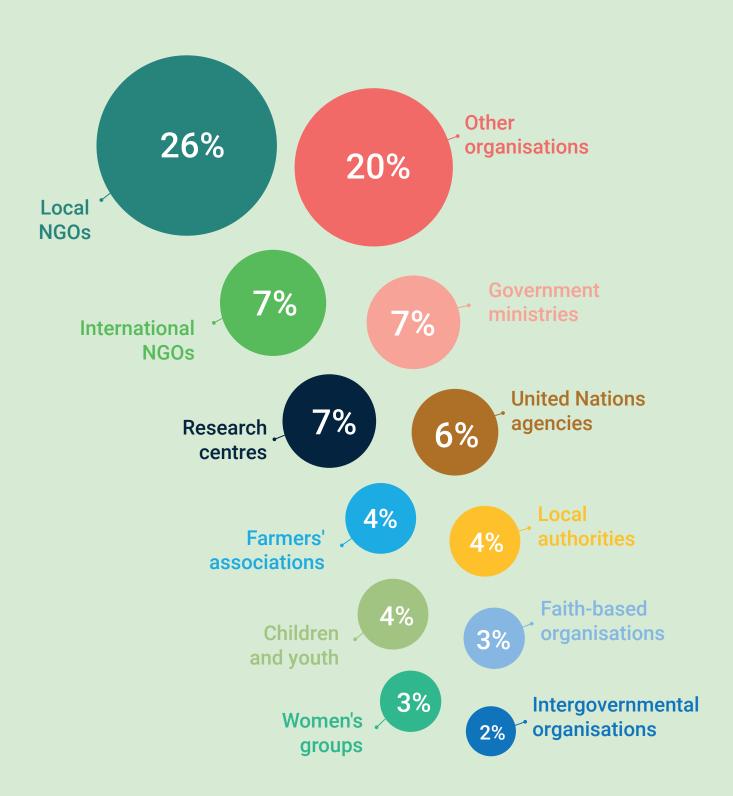


Figure 1.4 Project scope

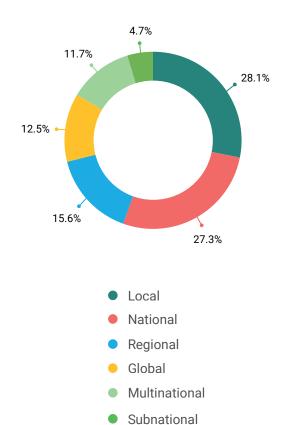
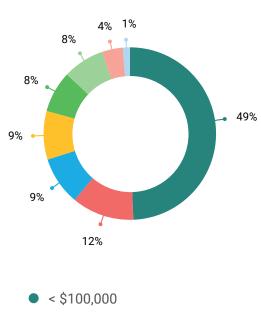


Figure 1.5 Project budget sizes

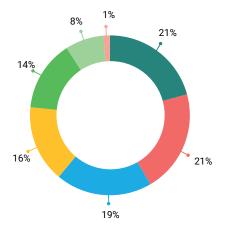


- \$2,500,000-5,000,000
- \$250,000-500,000
- \$1,000,0000-2,500,000
- \$100,000-250,000
- > \$5,000,000
- \$500,000-1,000,000
- Other

Most of the projects managed by the respondents' organisations are implemented at local (28 per cent) and national (27 per cent) levels, followed by regional (16 per cent), global (13 per cent) and subnational projects (12 per cent). Only 6 per cent of the submitted projects were implemented at a multinational level.

Most of the projects submitted through the survey aim to reach 100-1,000 beneficiaries (20.8 per cent), with the other projects aiming for 10,000-100,000 beneficiaries (20.8 per cent) and 1,000-10,000 beneficiaries (19.5 per cent). 15.6 per cent of projects targeted 100,000-1,000,000 beneficiaries.

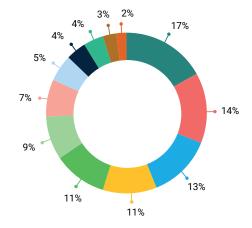
Figure 1.6 Number of beneficiaries by project



- 100-1,000
- 10,000-100,000
- **1,000-10,000**
- 100,000-1,000,000
- < 100
- > 1,000,000
- < 100

Most of the projects submitted through the survey aim to reach 100–1,000 beneficiaries (20.8 per cent), with the other projects aiming for 10,000–100,000 beneficiaries (20.8 per cent) and 1,000–10,000 beneficiaries (19.5 per cent). 15.6 per cent of projects targeted 100,000–1,000,000 beneficiaries.

Figure 1.7 Type of beneficiaries by project



- Rural communities
- Women's groups or associations
- Youth
- Farmers associations.
- Indigenous communities
- Coastal communities
- Local businesses
- Private sector
- Urban residents
- Other
- Faith-based communities
- International businesses



Figure 1.8 Ecosystems focused on by projects

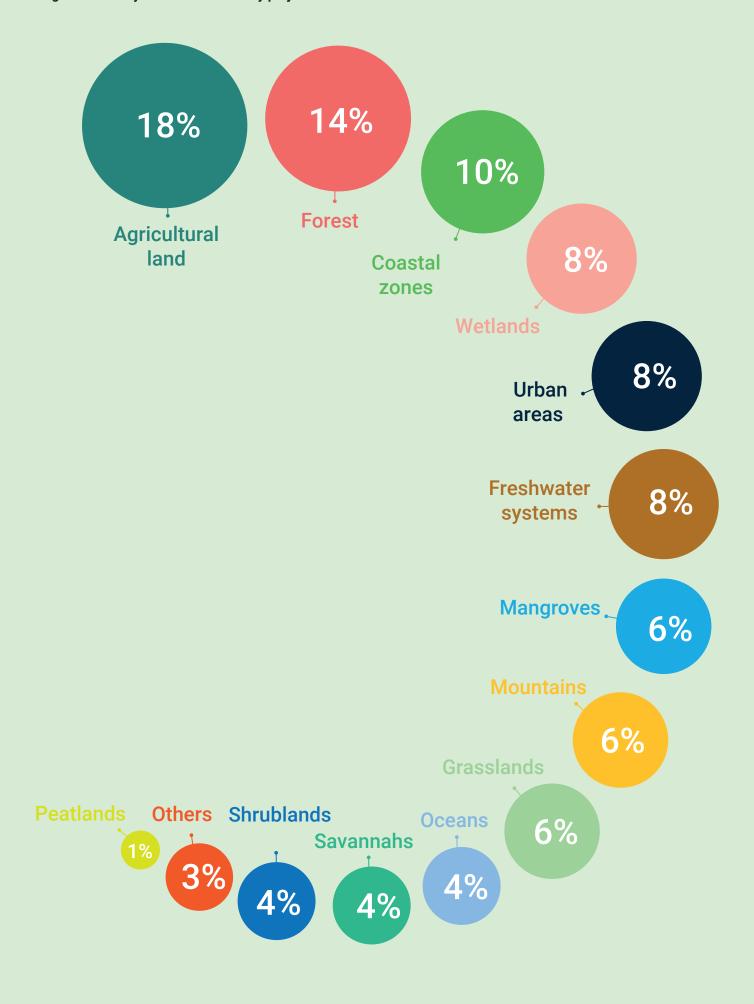


Figure 1.9 Sectors focus of projects

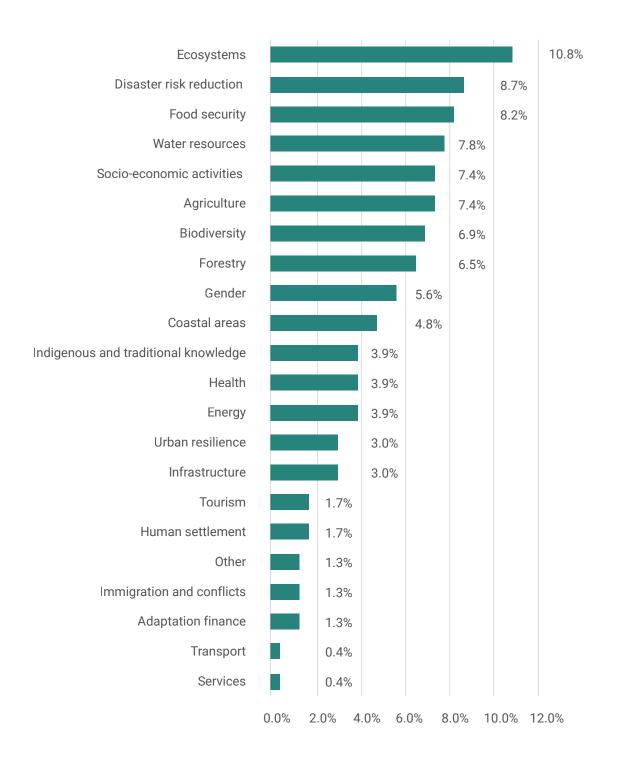
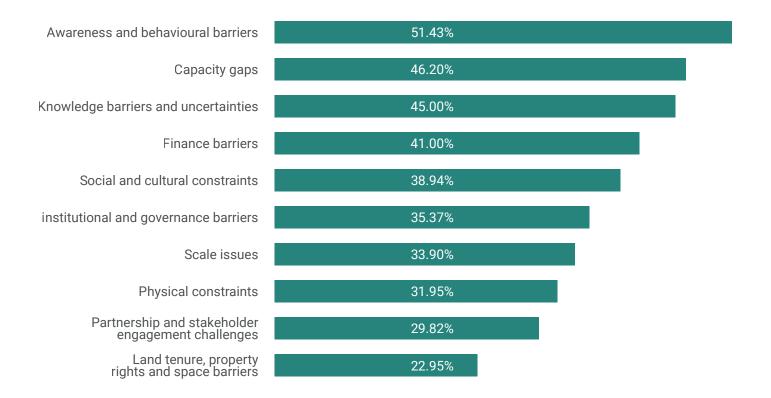


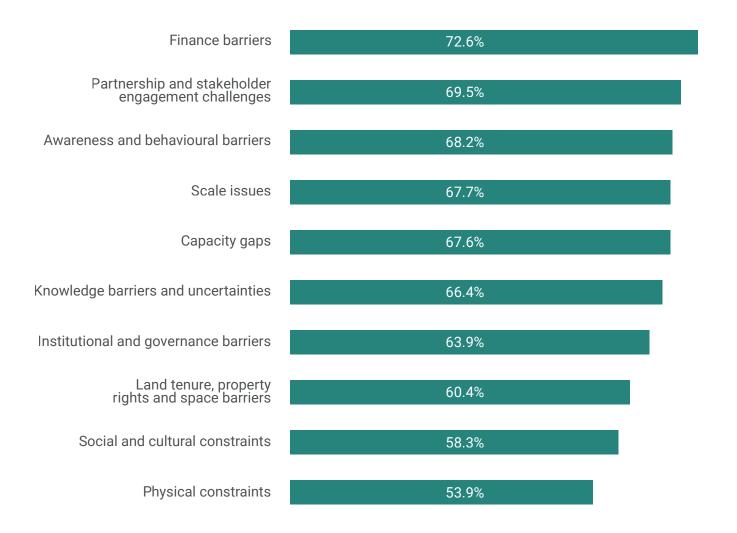
Figure 1.10 Most common barriers to the application EbA



The most common barriers to EbA implementation faced by respondents are awareness and behavioural barriers (51.43 per cent of the respondents), capacity gaps (46.20 per cent), knowledge barriers and uncertainties (45 per cent), and finance barriers (41 per cent). Other important subcategories of barriers are social and cultural constraints (38.94 per cent), institutional and governance barriers (35.37 per cent), and scale issues (33.9 per cent). The barriers least reported by the respondents are physical constraints (31.95 per cent), partnership and stakeholder engagement challenges (29.82 per cent), and finally, land tenure, property rights and space barriers (22.95 per cent).

It is important to recognize here that women and men face different challenges and barriers. This is due, for example, to the fact that women are more likely to live in poverty than men; have less access to and ownership of resources, both technological and natural; and have less access to knowledge and finance. These factors impact their ability to engage meaningfully as stakeholders and to participate equally in certain types of initiatives.

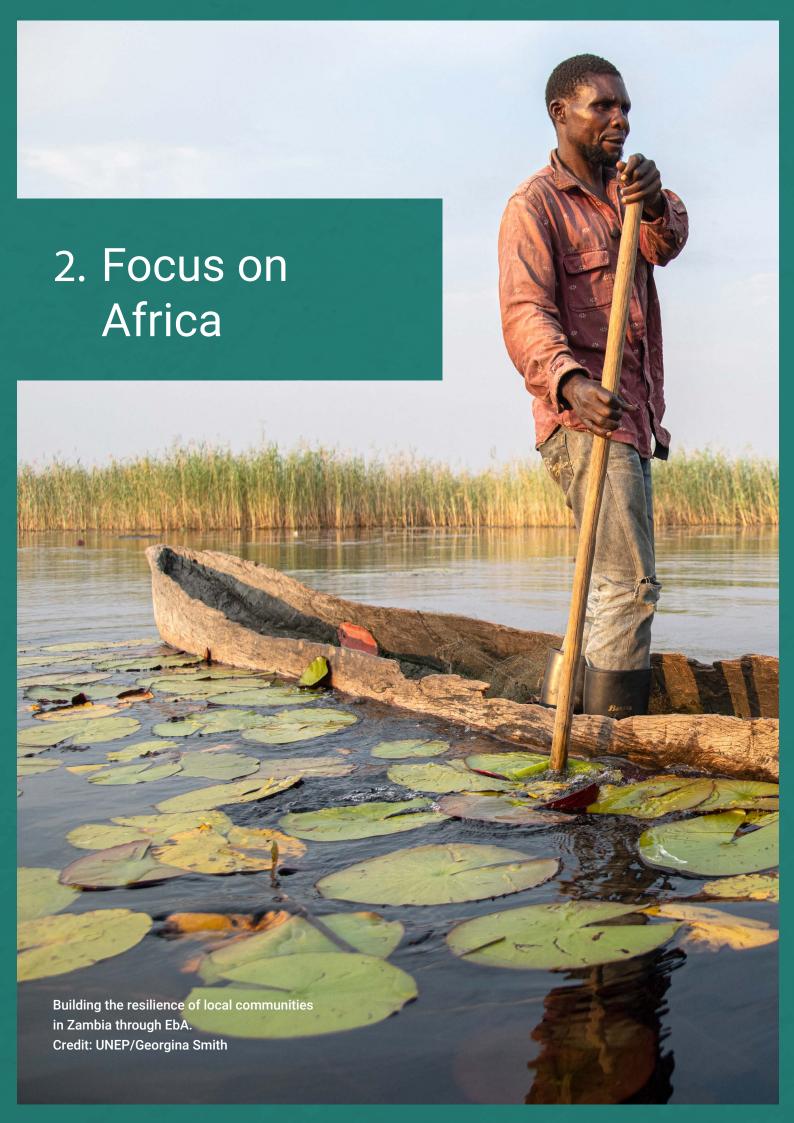
Figure 1.11 Most important barriers to overcome identified by the respondents (percentage of respondents)



When asked what they considered the most important barriers to overcome, 72.6 per cent<sup>1</sup> of respondents identified finance barriers, such as the lack of financial incentives and the lack of business models for the private sector to invest in EbA (see figure 1.11).

Based on the survey results, the next most important barriers to overcome are partnership and stakeholder engagement challenges (69.5 per cent), followed by awareness and behavioural barriers (68.2 per cent), scale issues (67.7 per cent), and capacity gaps (67.6 per cent). Other key subcategories of barriers identified include knowledge barriers and uncertainties (66.4 per cent), institutional and governance challenges (63.9 per cent), and land tenure, property ownership and space issues (60.4 per cent), followed by social and cultural (58.3 per cent) and physical constraints (53.9 per cent).

<sup>1.</sup> When ranking the different barriers, the respondents were able to choose between five different levels of importance. To calculate the different percentages and rank the barriers, a coefficient was allocated to each of these categories, with: Very important: 1; Important: 0.75; Moderately important: 0.5; Slightly important: 0.25; Not important: -1. This coefficient system allowed for analysis of all different answers, leading to a ranking that reflects the views shared by the practitioners and experts who took the survey.



The results included in this chapter come from the survey (61 respondents in Africa), and from two regional dialogues organised during the Community-Based Adaptation Conference (CBA15) in June 2021 and the African Climate Week (ACW2021) in September 2021, in which over 150 people participated.

# 2.1 General information

## 2.1.1 General survey results

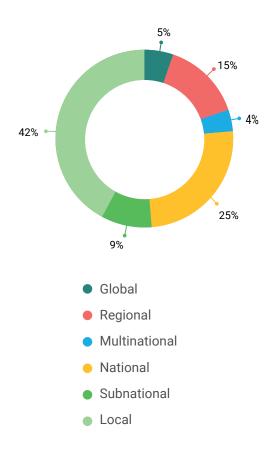
Most of the projects in Africa that were shared by the survey respondents were implemented in Eastern Africa (37 per cent) and Western Africa (35 per cent), but there were also several projects from Central Africa (13 per cent), Southern Africa (8 per cent), and Northern Africa (7 per cent).

In total, 46 case studies were submitted in English and 16 in French.

The respondents mostly belong to local and national NGOs (33 per cent) and farmers' associations (14 per cent), but respondents also included:

- Research centres (8 per cent)
- International NGOs (7 per cent)
- Women's groups (5 per cent)
- Indigenous and aboriginal groups (5 per cent)
- United Nations organisations (3 per cent)
- Youth and children's organisations (3 per cent)
- Scientific and industrial communities
   (3 per cent)
- Faith-based organisations (3 per cent)
- Local authorities (3 per cent)
- Business and industry (3 per cent)
- Ministries (2 per cent)
- Media (1 per cent)
- · Academic institutions (1 per cent)
- Microfinancing networks (1 per cent)

Figure 2.1 Scale of the projects



Most of the projects conducted by the respondents are implemented at the local (42 per cent) and national (25 per cent) levels, with regional projects accounting for only 15 per cent of the 62 projects submitted, global and multinational projects accounting for 5 per cent and 4 per cent respectively, and 9 per cent of the projects implemented at the subnational level (Figure 2.1).

Figure 2.2 Project budgets

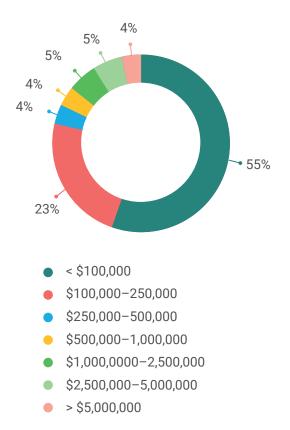
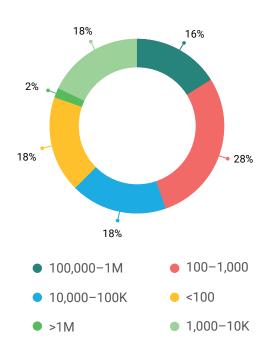


Figure 2.3 Number of beneficiaries by project



A majority of projects implemented by the respondents in Africa are very small, with 55 per cent having a budget of less than US\$100,000, and 23 per cent between US\$100,000 and US\$250,000.

The remaining 22 per cent have budgets of U\$\$250,000-500,000 (4 per cent), U\$\$500,000-1 million (4 per cent), US\$1 million-2.5 million (5 per cent) and US\$2 million-5 million (5 per cent), with only 4 per cent of projects having a budget greater than US\$5 million (Figure 2.2).

The ecosystems in which the various projects are implemented are mainly agricultural land (19 per cent), forests (15 per cent), coastal areas (11 per cent) and wetlands (10 per cent). Other ecosystems include urban areas (7 per cent), shrublands (6 per cent), mountains (6 per cent), savannah (6 per cent), freshwater ecosystems (6 per cent), mangroves (5 per cent) and grasslands (5 per cent). Only 3 per cent and 1 per cent are implemented in oceans and peatlands respectively.

Most projects target indigenous (16 per cent), coastal (13 per cent), rural (12 per cent) and faith-based (11 per cent) communities, as well as youth (13 per cent) as the main beneficiaries, while only 3 per cent aim to benefit urban residents and local businesses. Other important groups of beneficiaries include women's groups and associations (9 per cent), farmers' associations (8 per cent), and the private sector (8 per cent).

Most projects focus on sectors such as agriculture and food security (9 per cent), ecosystems, forestry and biodiversity (8.9 per cent), socioeconomic activities (5.8 per cent), water resources (5.6 per cent) and gender (5.6 per cent).

These initial results show that among the submitted projects in Africa, most EbA initiatives are small-scale local and national projects with limited budgets, implemented mainly by NGOs and other organisations such as farmers' associations, and focusing on issues such as food insecurity, desertification, sea level rise and soil quality degradation.

#### 2.1.2 Regional dialogues

A total of 126 people attended the two regional dialogues in Africa in June and September 2021. However, data is only available for 76 of the participants.<sup>2</sup>

A majority of the participants belonged to NGOs (27 per cent), intergovernmental organisations and other international organisations (21 per cent), and

United Nations organisations (20 per cent). Participants also belonged to private sector entities (14 per cent), academic institutions (10 per cent), national and subnational governments (7 per cent), and the media (1 per cent).

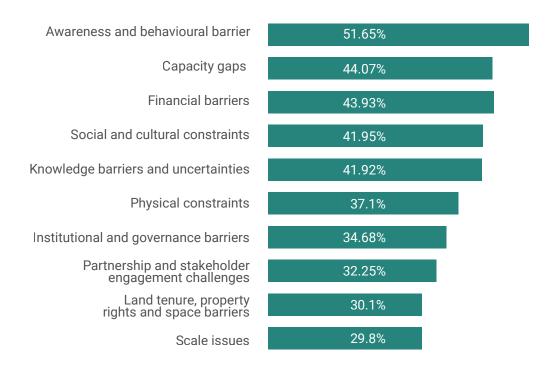
#### 2.2 Barriers to EbA

# 2.2.1 Most common barriers identified by respondents

Based on the results from the survey, the majority of respondents faced awareness and behavioural barriers (51.65 per cent) (Figure 2.4). The second most commonly reported subcategory of barriers is capacity gaps (44.07 per cent), while financial barriers are in third place (43.93 per cent).

On the other hand, only a small percentage of the respondents faced barriers related to land tenure, property and space (30.1 per cent), and scale issues (29.8 per cent).

Figure 2.4 Most common subcategories of barriers identified by the respondents



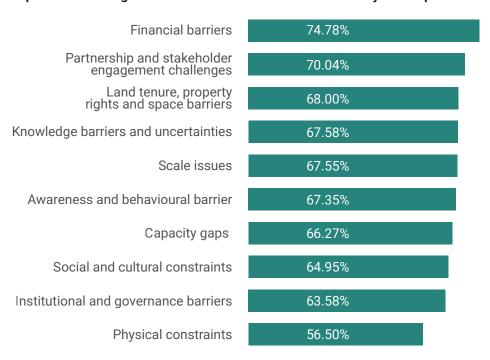
<sup>2.</sup> Some regional dialogues were hosted within a larger conference; for privacy reasons, not all participant details were shared.

## 2.2.2 Most important barriers to overcome

When ranking the different barriers, the respondents were able to choose between five different levels of importance. To calculate the different percentages and rank the barriers considering, a coefficient was allocated to each of these categories, with: Very important: 1; Important: 0.75; Moderately important: 0.5; Slightly important: 0.25; Not important: -1. This coefficient system allowed for analysis of all different answers, leading to a ranking that reflects the views shared by the practitioners and experts who took the survey.

When asked to rank the different barriers (see Figure 2.5), 74.78 per cent of the respondents stressed that finance barriers were important to overcome, making it the most important subcategory of barriers to overcome, based on this ranking. Finance barriers can include, for instance, specific difficulties in accessing long-term sustainable financing for EbA implementation, maintenance and monitoring, or the lack of financial incentives and business models for the private sector to invest in EbA. Partnership and stakeholder engagement represents the second most important subcategory (70.4 per cent), followed by land tenure, property ownership and space barriers (68 per cent), and barriers linked to knowledge (67.58 per cent) (see Figure 2.5).

Figure 2.5 Most important subcategories of barriers to overcome identified by the respondents



The barriers ranked least important by respondents include physical constraints (56.5 per cent) such as ecosystems not providing the desired adaptation outcome because they are too degraded, too small or too fragmented to provide key ecosystem services or institutional and governance challenges (Figure 2.5).

This ranking shows that the most common barriers are not necessarily perceived to be the most important to prioritize. This is the case, for example, for capacity gaps, which more than 44 per cent of respondents faced (Figure 2.4), but which only came seventh in the ranking of importance (Figure 2.5). In contrast, barriers related to partnerships and stakeholder engagement challenges were only encountered by 32 per cent of respondents (Figure 2.4), but were identified as the second most limiting subcategory of barriers to the adoption and scaling up of EbA in Africa (Figure 2.5).

# 2.3 Overcoming barriers

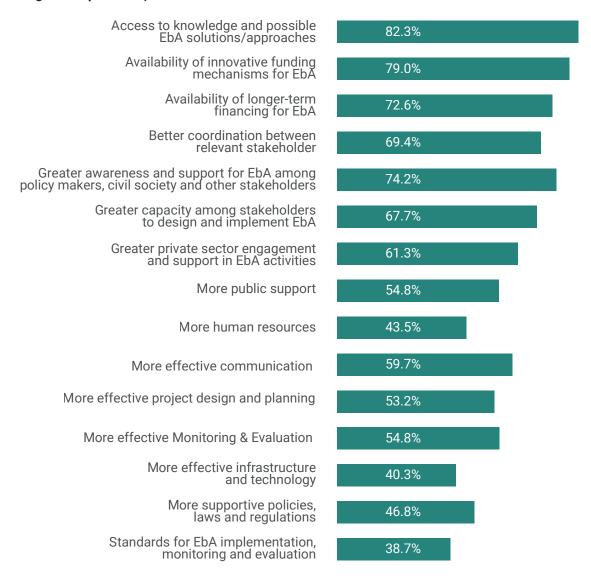
# 2.3.1 Solutions collected from the survey

To overcome the different barriers to EbA, a majority of the respondents suggested improving the access to knowledge and EbA solutions (82.3 per cent) (Figure 2.6). Most also agreed on financial activities such as finding new innovative funding mechanisms (79 per cent) and longer-term financing (72.6 per cent) specific to EbA. Other suggestions made by the respondents were related to improving the awareness and support

for EbA among policymakers, civil society and other stakeholders (74.2 per cent), finding ways to guarantee better coordination between relevant stakeholders (69.4 per cent) and a greater capacity among them to design and implement EbA (67.7 per cent).

As illustrated in Adaptation Gap Report 2021, scaling up funding for EbA initiatives is still a priority in Africa. But working on raising awareness and informing policymakers, the civil society, and communities across Africa about the benefits of EbA, how to implement such initiatives, and the conception of coherent, harmonized and standardized policies across ministries and government entities, should also be priorities.

Figure 2.6 Ranking of potentially useful activities to overcome barriers to EbA identified by the respondents (percentage of respondents)





# 2.3.2 Solutions collected from the dialogues

The dialogues reflect the results from the survey on solutions, with additional solutions also highlighted by the participants:

- Repackaging and disseminating actionable knowledge to primary users.
- Ensuring that knowledge flows from local to global levels, to help the global community understand what is needed from the local level.
- Unlocking existing sources of funding, redirecting and/or eliminating existing subsidies.
- Engaging the private sector and starting publicprivate partnerships.
- Shifting policy to change and shorten the value chain to support value-added products.
- Assessing and evaluating ecosystem services to ensure the understanding of the role of biodiversity and the need for investing in the protection, sustainable management and restoration of biodiversity and ecosystems, while also creating incentive mechanisms as building blocks for EbA strategies in Africa.
- Focusing on humanitarian development goals in a more creative outcome-based and outcome-driven approach, EbA can continue to be a cross-cutting approach that is well placed for innovative financing solutions.
- Creating local-based market incentives.
- Including EbA and other forms of climate adaptation in education.
- These live breakout sessions in the dialogues allowed the formulation of four key messages:
- Appropriate innovative EbA approaches must prioritize the needs of local communities – including empowering local, traditional, youth, and women's perspectives and knowledge – from the start of project development, and continue this engagement for the long term.
- It is crucial to overcome the siloed approach and adopt an integrated approach to developing, financing and implementing EbA, including in policies and on the ground approaches.
- Integrating gender equality and social inclusion (GESI) is crucial when discussing, planning, and

- implementing innovative approaches and innovative financial solutions for EbA across Africa, and across the globe.
- Projects must move from pilot to full scale, meaning that activities are implemented in all the geographical areas identified by the project. Monitoring, evaluation and learning (MEL) is a critical component of implementing any EbA project, including catalysing access to novel sources of finance (i.e. promoting other cross-sectoral collaboration).

Additionally, considering the strong focus on agricultural lands and food systems on the continent, participants also formulated recommendations specific to this sector:

- Knowledge and experience exist on the ground and need to be scaled up with the support of enabling factors, such as developing and adapting policies, creating incentives to support EbA across sectors, and reducing destructive farming practices that are the drivers of biodiversity and ecosystem services loss, leading to increasing vulnerabilities of local communities and reducing their ability to face climate change impacts.
- Adopting and supporting climate-smart agriculture, agroecology, regenerative agriculture and the restoration of degraded lands is key to supporting biodiversity and adaptation.
- Supporting sustainable capacity development on EbA is required. Initiatives such as the existing GAN, its regional node the Ecosystem Based Adaptation for Food Security Assembly (EBAFOSA), and the United Nations Decade on Ecosystem Restoration (2021–2030) are great opportunities to build upon to speed up and boost EbA on the ground.
- EbA needs to be complemented by taking a value chain approach (from production to end consumers) and the whole food system approach, including behaviour change in consumption and attitudes, together with financial incentives and policies that will help EbA development.

## 2.3.3 Innovative solutions for overcoming barriers

**Enhancing Climate Change Adaptation in the North** Coast and Nile Delta Regions in Egypt3

#### Implementing agency/organisation:

Government of Egypt, Ministry of Water Resources and Irrigation

#### **Project description:**

This project seeks to support adaptation efforts in the Nile Delta of Egypt by reducing coastal flooding risks arising from the combination of sea level rise and more frequent and intense storm events. The project aims to do this by promoting and scaling up a set of "soft engineering solutions" and ecosystem-based coastal protection measures. The different outputs include:

- the construction of 69km of dune dikes along with five vulnerable hotspots, achieved through sitespecific assessments and detailed designs for EbA in these hotspots:
- the construction of coastal soft protection structures (based on sea level rise projections, anticipated height of storm surge, and other geomorphological characteristics), such as sand dune stabilisation through the cultivation of wild plants and wooden barriers;
- preserving natural defences against sea encroachment or sea level rise;
- and the development and implementation of an operations and maintenance programme for protection structures.

Each design will use sand from site excavation activities as fill material. Based on existing piloting, within two to four years, enough sand will have accumulated within the interlocking fence that it will resemble a natural dune.

Innovative solution and lessons learned:

When nature-based solutions and EbA were introduced in Egypt several years ago, a majority of the practitioners and engineers were not convinced it could present a viable solution to adapt to sea level rise and extreme weather events in the Nile Delta. To convince them, several pilots were constructed at full scale but for a short duration to assess their performance and demonstrate their viability. The outcome was promising but some doubt remained due to the short duration of the test. Hence, a full-scale "pilot" with approximately 5km length was constructed in a vulnerable area in the Nile Delta. The assessment showed these structures can not only protect populations against extreme weather events and sea level rise, but do so at a fraction of the cost of equivalent hard structures.

Consultation with local communities was also key to success, as they provided information on the simple techniques used to protect their lands and houses, which formed the basis for the development of the EbA solutions now used to protect the Nile Delta.

You can learn more about the project here.

#### **Reclaiming Our Green**

#### Implementing agency/organisation: Inter-Religious Council of Kenya (IRCK)

#### **Project description:**

Reclaiming Our Green is a faith-led initiative, established in collaboration with other partners, that seeks to increase forest cover at the congregational level. The objectives of the initiative include engaging religious leaders and faith communities in afforestation and reforestation, and building the capacity of religious leaders in tree growing, water conservation and waste management in places of worship. Other EbA measures undertaken by faith communities include restoring, maintaining or improving ecosystem health; policies at multiple levels; and supporting equitable governance and enhancing capacities of the vulnerable faith communities.

Innovative solution and lessons learned:

Reclaiming Our Green is developing Maskani Youth Forums to help raise awareness and build the capacity of youth in EbA interventions. Farming God's Way is a tool that integrates technology, monitoring, and knowledge in the implementation of climate-smart technologies at the congregational level.

# Monitoring Peace and Security Benefits of EbA in Kenya<sup>4</sup>

#### Implementing agency/organisation:

**Conservation International** 

#### **Project description:**

In the Chyulu Hills of south-eastern Kenya, this project will work with indigenous Maasai communities to restore 11,000 hectares of grasslands to improve pastoral livelihoods and explore the connections between climate adaptation, ecosystem restoration and human security, as well as reducing human-human and human-wildlife conflict driven by climate change. Accompanying the on the ground work in Kenya, a grant from the Global EbA Fund will support complementary research on conflict sensitivity and climate resilience.

#### Innovative solution and lessons learned:

The project will demonstrate the linkages between grassland restoration and conflict resolution, identify climate-resilient and conflict-sensitive practices to inform the improvement of land management plans and grassland restoration, and increase the awareness and support of local NGOs, local communities, traditional local authorities, and national and international decision makers on those linkages and practices.

You can learn more about the project here.

# 2.4 Sustainability, replicability and scalability

#### 2.4.1 Sustainability

Of the respondents who had already completed their projects, over 88 per cent stated that their activities were sustained after completion.

This was made possible, for example, through the involvement of different stakeholders such as community-based organisations, religious institutions, communities, government and local authorities, and already-established committees. Some projects were also taken over by other NGOs and local authorities after their completion.

#### 2.4.2 Replicability

Of respondents, 99 per cent believe that their activities can be replicated, but of the 59 per cent whose project was already completed, so far only 58 per cent have been able to replicate some of their activities.

In Mali, for example, in the commune of Tangadougou Faraba, a project to restore 10 hectares of degraded land from a former gold panning site – and ensure its protection by a metal fence – benefited the population by mobilising the local beneficiaries, installing beehives and creating new livelihood opportunities, which has been replicated by communes in the south.

For its part, the Nigerian Women Agro Allied Farmers Association (NIWAAFA) explains that its work has been showcased at events such as the Global Landscapes Forum Africa digital conference in 2021, which has enabled its activities to gain ground and be replicated in other parts of Nigeria.

<sup>4.</sup> Project information provided in 2021.

Others have decided to introduce their activities to universities and students to encourage them to launch similar actions once their studies are completed. Interviewees explained that in order for some activities to be replicated globally, the project needs to be scaled up to national and regional levels, which will attract sufficient attention for the project eventually to be replicated in other parts of the world.

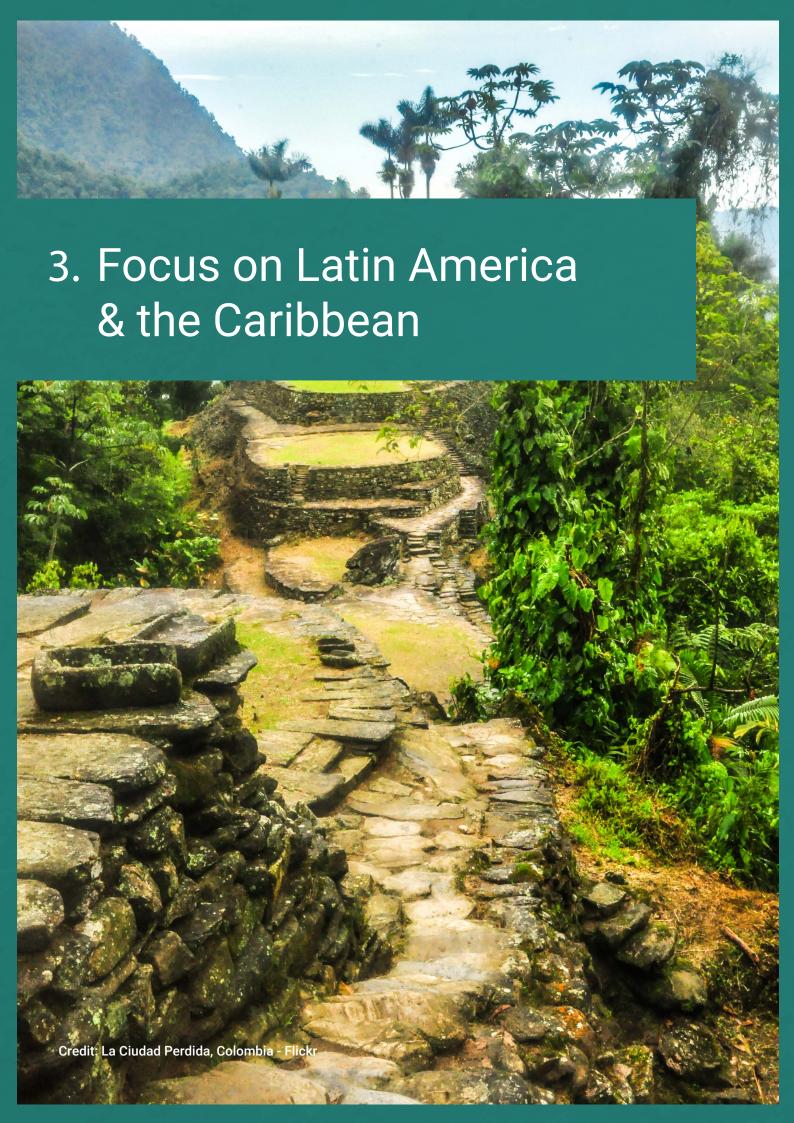
On the other hand, those who had not been able to replicate their project activities at the time explained this was mainly due to a lack of funding and resources. COVID-19 also slowed down the activities of many projects, making it difficult to support the replication of these efforts elsewhere.

## 2.4.3 Scalability

While 99 per cent of respondents believe that their projects can be scaled up, only 46 per cent of completed projects have been successfully scaled up.

As with the replicability of their projects, respondents who were not able to scale up explained that this was mainly due to limited funding, as well as the impact of COVID-19.





The results shared in this section derive from the survey (answered by 17 practitioners and experts from Latin America and the Caribbean) and two dialogues attended by over 150 participants, which were organised during the Community-Based Adaptation Conference in June 2021 and the Latin America and the Caribbean Climate Week (LACCW2021) in September 2021. Due to the fairly small sample size, these results may not be representative for the overall EbA projects in the region.

# 3.1 General survey results

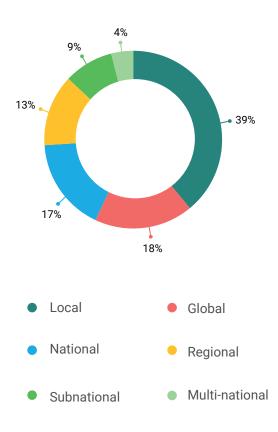
### 3.1.1 Information from the survey

Most of the projects shared by the respondents to the survey implemented in the LAC region were implemented in South America (62 per cent) and Central America (28 per cent), but also from the Caribbean (10 per cent). In total, 14 case studies were submitted in Spanish and three in English.

The respondents mostly belong to local and national NGOs (47 per cent) and local authorities (11.7 per cent). Further respondents were from United Nations organisations, scientific and industrial communities, business and industry, government ministries, academic institutions, microfinancing networks and consulting firms.

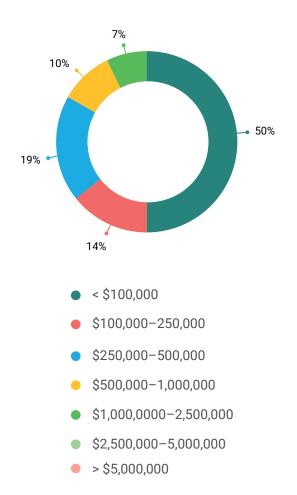
Most of the projects conducted by the respondents are implemented at the local (39 per cent) and global (18 per cent) levels (Figure 3.1). Unlike in Africa, national projects in the LAC region represent only 17 per cent, and regional projects account for 13 per cent. Finally, 9 per cent are implemented at the subnational level and 4 per cent are multinational.

Figure 3.1 Scale of the projects



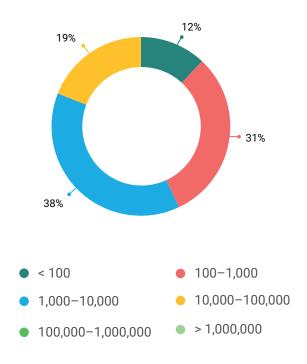
A majority of projects implemented by the respondents in the region are small, with 50 per cent having a budget of less than US\$100,000, and 14.3 per cent having US\$100,000-250,000. However, 28.6 per cent of projects have a budget of US\$500,000-1 million and US\$1 million-2.5 million, and 7.2 per cent have a budget of US\$2.5 million-5 million. No projects have a budget greater than US\$5 million.

Figure 3.2 Project budgets



Regarding the number of beneficiaries each project aims to reach in the LAC region, 81 per cent of the projects are aiming to reach less than 10,000 people (Figure 3.3). More specifically, 12 per cent aim to reach less than 100 people, 31 per cent plan to reach between 100 and 1,000 people, and 38 per cent seek to reach between 1,000 and 10,000. On the other hand, 19 per cent plan on benefiting over 1 million people.

Figure 3.3 Expected number of beneficiaries



The ecosystems in which the various projects are implemented are mainly urban areas (15 per cent), agricultural land (11 per cent), forests (11 per cent), fresh water (11 per cent) and coastal areas (10 per cent). Other ecosystems include mountains (9 per cent), wetlands (9 per cent), mangroves (4 per cent), and grasslands (5 per cent). As in Africa, only 2 per cent are implemented in oceans and peatlands.

Most projects in the LAC region focus on ecosystems and biodiversity (10.5 per cent) and disaster risk reduction (10.1 per cent). Other important sectors include adaptation finance (6.7 per cent), water resources (6.7 per cent), socioeconomic activities (5.9 per cent) and urban resilience (5.9 per cent). Forestry accounts for only 1.7 per cent of projects, and food security and agriculture for 4.6 per cent, with the lowest sectors being human settlements, immigration and displacement (2.4 per cent), transport (0.8 per cent), and finally energy and industry, with no projects represented in these sectors (0 per cent).

The groups that most projects aim to benefit are urban residents (15.9 per cent), rural communities (14.9 per cent), youth (14.9 per cent) and coastal communities

(11.1 per cent). Other important groups of beneficiaries include women's groups and associations (9.5 per cent), farmers' associations (9.5 per cent), indigenous communities (7.9 per cent), and local businesses (7.9 per cent). The groups targeted least by projects are religious communities and international corporations (1.6 per cent each).

These early results show that a majority of the EbA initiatives submitted by the participants are local and national projects, implemented for the most part by local and national NGOs and local authorities with a limited budget. Most of these projects are small-scale projects and aim at benefiting less than 10,000 people. However, there is also an important number of global projects being implemented in the region, as well as many regional initiatives with larger budgets, aiming to benefit over 1 million people. These regional initiatives focus on issues such as disaster risk reduction and, especially in urban areas, biodiversity and ecosystems, with a focus on freshwater ecosystems and water resources.

These results show that multinational initiatives are lacking, that international corporations and religious communities are not sufficiently targeted, and that projects should focus more on activities related to

transport, and immigration and displacement.

#### 3.1.2 Regional dialogues

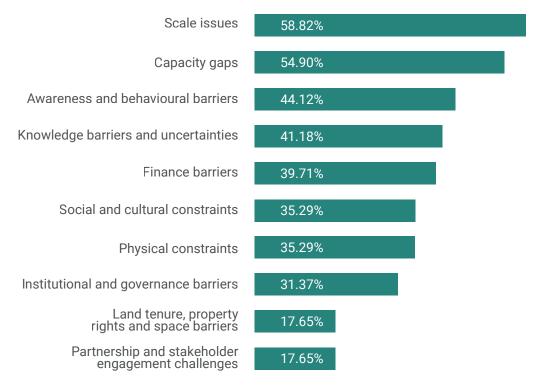
A total of 288 people attended the two dialogues, including a majority of the respondents from Central America (51 per cent), followed closely by South America (44 per cent), with only a few from the Caribbean (5 per cent).

A majority of the participants belong to NGOs (27 per cent), intergovernmental and other international organisations (21 per cent), and United Nations organisations (20 per cent). Participants also belong to private sector entities (14 per cent), academic institutions (10 per cent), governments at national and subnational levels (7 per cent), and the media/press (1 per cent).

## 3.2 Barriers to EbA

# 3.2.1 Most common barriers identified by the respondents

Figure 3.4 Most common barriers identified by the respondents (percentage of respondents)



Based on the survey responses from the respondents, the most common EbA barriers are linked to scale issues (58.82 per cent) (see Figure 3.4). Other important subcategories include capacity gaps (54.9 per cent), such as the lack of institutional capacities for mainstreaming EbA into national plans and policies, and awareness and behavioural barriers (44.41 per cent), such as the incomplete understanding of the science of ecosystem services. Partnership and stakeholder engagement challenges, land tenure, property ownership, and space barriers have each been faced by only 17.65 per cent of the respondents, making them the least encountered barriers.

The participants responded with similar answers during the dialogues, with the lack of funding being the most important barrier (44 per cent) for most of the practitioners. Other important barriers include governance barriers and the lack of political will (31 per cent), the lack of knowledge and technical capacity (15 per cent), and the availability of lands and territorial planning barriers (10 per cent). Finally, issues linked to corruption and illegal activities in the region were also highlighted as an important barrier.

# 3.2.2 Most important barriers to overcome

When ranking the different barriers, the respondents were able to choose between five different levels of importance. To calculate the different percentages and rank the barriers considering, a coefficient was allocated to each of these categories, with: Very important: 1; Important: 0.75; Moderately important: 0.5; Slightly important: 0.25; Not important: -1. This coefficient system allowed for analysis of all different answers, leading to a ranking that reflects the views shared by the practitioners and experts who took the survey.

When asked to rank the different barriers, 78 per cent of the respondents stressed that capacity gaps was an important subcategory of barriers that needed to be overcome. This includes barriers such as the lack of EbA training programmes and skilled knowledge brokers, as well as the limited technical capacity among professionals in planning, designing, implementing,

maintaining and monitoring EbA in different sectors. Other important subcategories of barriers include awareness and behavioural barriers (77.9 per cent), scale issues (76.45 per cent) such as the mismatched short time frame for decision-making, investor planning and project funding, versus the long time frame needed for adaptation benefits to accrue. Finance barriers, such as the lack of financial incentives and business models for the private sector to invest in EbA, were ranked fourth with 74.6 per cent.

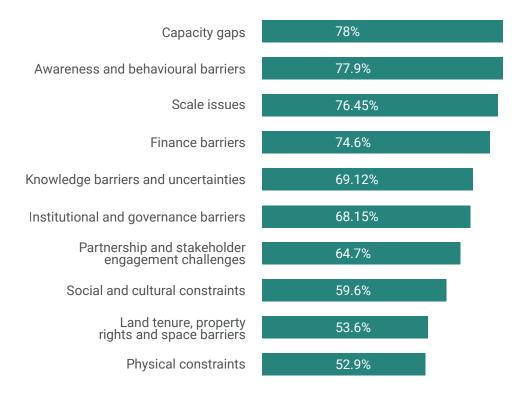
The least important barriers, according to this ranking, are linked to physical constraints (52.9 per cent), land tenure, property ownership and space barriers (53.9 per cent), such as the availability and price of the land, and social and cultural constraints (59.6 per cent) (Figure 3.5).

This ranking reflects the barriers that respondents faced while implementing projects (Figure 3.4). Capacity gaps are the most important (78 per cent), followed by awareness and behavioural barriers (77.9 per cent), then scale issues and finance barriers (76.45 per cent and 74.6 per cent respectively) (Figures 3.4 and 3.5).

More significant differences can be seen concerning the less commonly identified subcategories, with the lowest-ranked subcategory being physical constraints at 52.9 per cent (Figure 3.5), while it is the seventh-highest barrier subcategory faced by the respondents (Figure 3.4). Land tenure, property and space barriers are the second-lowest subcategory at 53.9 per cent (Figure 3.5), which reflects the experience of respondents. Unlike this subcategory, only 31 per cent of respondents had problems related to institutional and governance challenges (Figure 3.4), but 68.15 per cent indicated this subcategory was important, which puts it at number 6 in the ranking (Figure 3.5).

This ranking shows that, in many cases, the barriers encountered are those that should be prioritized, but in some cases, despite facing certain barriers, the respondents perceive other barriers are more impactful and should be prioritised.

Figure 3.5 Most important barriers to overcome identified by the respondents (percentage of respondents)



In contrast, the sixth most encountered subcategory of barriers, social and cultural constraints, was ranked only as the eighth most important subcategory to overcome.

# 3.3 Overcoming barriers

# 3.3.1 Solutions collected from the survey

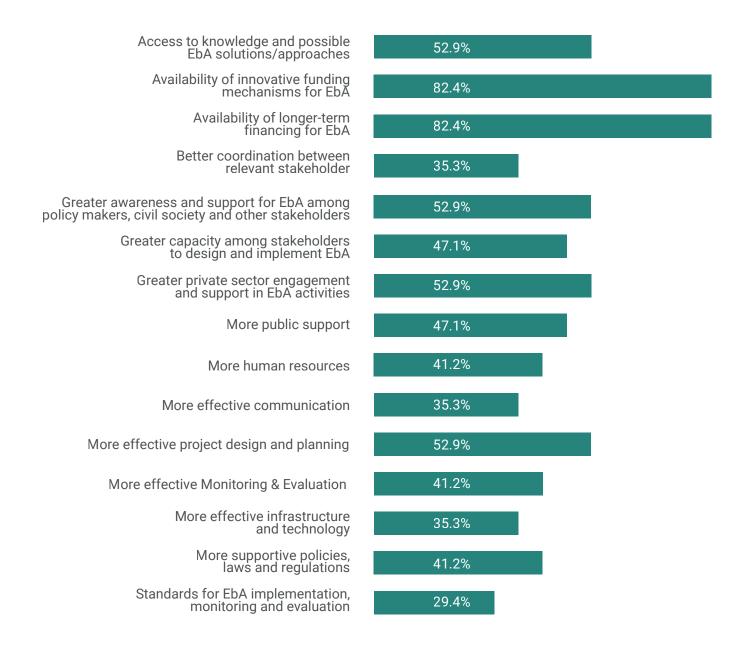
To overcome the various obstacles to EbA, the majority of respondents highlighted the need to increase the availability of innovative financing mechanisms and longer-term financing specific to EbA (82 per cent) (Figure 3.6). Of the respondents, 52.9 per cent also agreed on the following three activities:

- Improving access to knowledge on EbA and possible solutions and approaches.
- Increasing awareness of EbA among policymakers, civil society and other stakeholders.
- Improving the effectiveness of project design and planning.



Credit: Morro do Cantagalo Copacabana, Rio de Janeiro State of Rio de Janeiro, Brazil - Flickr

Figure 3.6 Ranking of potentially useful activities to overcome barriers to EbA identified by the respondents (percentage of respondents)



These results show that increasing funding for EbA initiatives remains a priority in the LAC region (Figure 3.6). But again, efforts are needed to raise awareness and better inform policymakers, civil society and

communities about the use of EbA and the benefits these initiatives can bring.

# 3.3.2 Solutions collected from the dialogues

During the two dialogues, the participants identified a whole set of barriers, including:

- Boosting public knowledge
- Overcoming lack of leadership by promoting job creation through EbA
- Emphasising non-conventional alliances for action (city-city and state-state partnerships) when international inertia slows
- Creating local environment funds
- Creating land valuation mechanisms
- Creating environmental taxes
- Creating tax incentives
- Environmental compensations
- Green land appropriation
- Carbon bonds and markets
- Training for funds
- Sponsorship incentives
- Blue carbon programmes

When asked specifically about how to overcome barriers to knowledge, participants felt it was important to include more knowledge about EbA in the education systems of schools and universities (60 per cent), but also to create more educational programmes through Massive Open Online Courses (MOOCs), or radio and television, for example (23 per cent). Other interesting suggestions included working to add more knowledge on platforms with gamification techniques (such as social networks, apps and video games) (10 per cent),

and organising publicity campaigns with celebrities from the region (7 per cent).

Regarding the lack of political and public leadership and support for EbA, participants recommended highlighting the potential of the practice to create jobs and savings (66.7 per cent). Other suggestions included creating favourable trade conditions with key EbA countries (16.8 per cent), launching community pride campaigns (10 per cent) and even creating a new Nobel Prize for EbA (6 per cent).

# 3.3.3 Innovative solutions for overcoming barriers

**Payments for Environmental Services for the Local** Authorities in Caldas Department, Colombia5

#### Implementing agency/organisation:

Corporación Autónoma de Caldas - Corpocaldas

#### **Project description:**

This project, focusing on Payments for Ecosystem Services (PES), conserved forests and natural carbonfixing ecosystems located in the private properties of farmers in seven municipalities of Caldas. Benefits were derived from the water sources generated in forests under the PES programme, along with support for agricultural and livestock production.

#### Innovative solution and lessons learned:

The Colombian regulatory framework allows for the use of financial resources from the governor's and mayor's offices for the conservation of areas of environmental interest in each territorial entity, either through the purchase of land or the design and application of PES.

<sup>5.</sup> Project information provided in 2021.

# Strengthening Restoration Initiatives with Agroforestry Systems in the Sico Valley, Paulaya, Honduras

#### Implementing agency/organisation:

Fundacion MaderaVerde

#### **Project description:**

This project aims to expand an area of agroforestry systems (plantain, cacao, madreado and mahogany) from 10 hectares to 50 hectares with restoration activities.

#### Innovative solution and lessons learned:

Through establishing agreements with local producers and commercialising agricultural products and mahogany wood, this project supports the generation of local income and the improvement of the livelihoods of these producers and their families. Agreements to receive assistance and supervised sales create and secure the capitalisation of funds for the enterprise or business.

You can learn more about the project here and here.

# Financing and Enabling Community EbA for Water and Energy Security<sup>6</sup>

#### Implementing agency/organisation:

World Resources Institute (WRI)

#### **Project description:**

This project, together with the Governments of Colombia and Costa Rica, will introduce a new financing approach for EbA that capitalizes on how hydropower companies rely on healthy ecosystems for clean and ample water supply.

Articulating the benefits of EbA for hydropower will justify payments to upstream communities, compel investors to cover the costs of implementing EbA, and incentivize hydropower companies to repay investments based on improved revenues or reduced costs.

Simultaneously, the project will strengthen resilience for water and energy security, while providing pathways to sustainable livelihoods for forest-dependent

communities, creating a case for replication through the establishment of national programmes and the global dissemination of lessons learned.

#### Innovative solution and lessons learned:

The proposal is developing a proof of concept of the hydropower EbA scheme, recruiting new financial sources to support communities to implement EbA and achieve better climate resilience – with high potential for replication in other countries that rely on hydropower.

This project received a grant from the Global EbA Fund to help with the implementation of its activities.

You can learn more about the project here.

# 3.4 Sustainability, replicability and scalability

### 3.4.1 Sustainability

Among respondents whose projects are already completed, over 86 per cent stated that their activities were sustained after the project's completion.

This has been achieved, for instance, through the organisation of frequent inspections to verify the operation of the system, and the training of new neighbourhood leaders, specifically on integrated and co-responsible water and watershed system management. Other projects worked with local authorities and policymakers to influence municipal policies so that these activities are included in their plans and replicated in other neighbourhoods.

Finally, to ensure activities will be sustained after completion, all the various actors working in this area have invited their project team to participate in the development of plans and mechanisms, (such as mechanisms for remuneration for ecosystem services (MERESE) for the Cañete River in Peru), which will

<sup>6.</sup> Project information provided in 2021.

ensure these activities can be sustained.

#### 3.4.2 Replicability

All 100 per cent of respondents believe that their activities can be replicated. Of the 39 per cent respondents whose project was already completed, 85 per cent had been able to replicate it successfully, using different approaches. Most of the projects were replicated after demonstrating the success of the activities to the local and national authorities.

In the Municipality of Quepos, Costa Rica, a PhD student began implementing a project on a very small scale in one of the smaller sub-basins to develop their pilot. She was able to make rapid progress and achieve results, successfully demonstrating the added value of these activities to the local authorities, who are now interested in replicating the initiative in other parts of the Municipality of Quepos.

Effective communication about the success of the project and the benefits it will generate, not only for the environment and the climate but also financially, socially and economically, is an excellent way to attract the attention of other stakeholders, national authorities and investors. For example, the community of Miraflores was visited by another project of the regional government of Junín (Área de Conservación Regional Huaytapallana) after they learned about the initiative, leading to a successful replication of its activities.

While replicating EbA projects can help scale up adaptation, some respondents stressed the need to always consider the geographical environment, the context of the study area and the legal framework of the area where the activity could be replicated, to avoid any counterproductive initiatives.

#### 3.4.3 Scalability

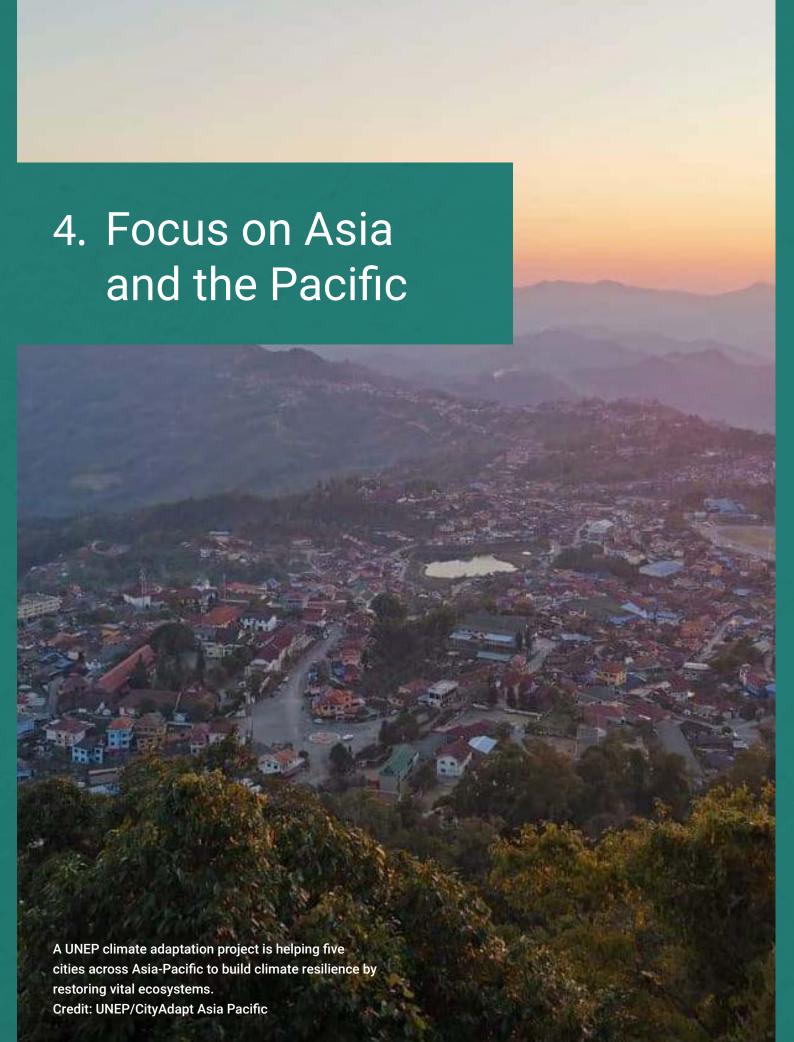
In line with the responses received regarding the replicability of their projects, 100 per cent of respondents believe that their initiatives could be scaled up.

The different approaches highlighted in the responses include formulating a new project that augments and complements activities already implemented, and applying for grants from environmental funds, such as the Green Climate Fund, the Global Environment Facility, the Adaptation Fund and the Global EbA Fund. Further support and technical backstopping can come from various organisations, such as the EbA Support Facility.

Working with municipalities and local authorities to include these activities in their development agendas should be a priority to successfully support and scale up these adaptation efforts.



Credit: Taganga, Magdalena, Colombia - Flickr

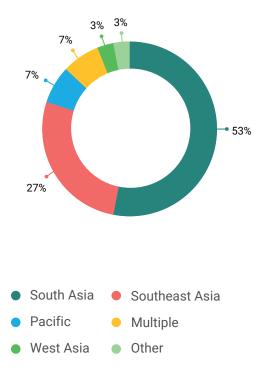


The results shared in this section derive from the EbA survey, for which 30 responses were received in the Asia-Pacific and West Asia region. Some of the inputs also come from the Global EbA Fund Asia-Pacific regional dialogues webinar organised in August 2021, which was attended by 160 participants including government officials (11 per cent of participants) and representatives of intergovernmental organisations (11 per cent), NGOs/civil society organisations (30 per cent), academia (30 per cent) and the private sector (6 per cent), among others. Additional events, forums and webinars that informed this section include the Asia-Pacific Adaptation Network (APAN) Forum in March 2021, the associated virtual dialogues webinar in November 2020, the Gobeshona Global Conference in January 2021, the Innovate 4 Cities Conference sessions in October 2021, and other events in the Asia-Pacific region where EbA and the potential barriers to EbA upscaling have been discussed.

4.1 General information

## 4.1.1 General survey results

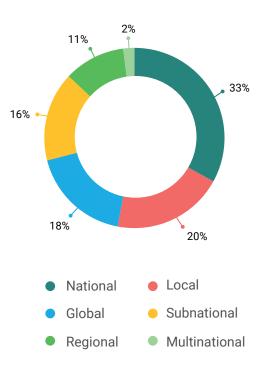
Figure 4.1 Project location



Most of the survey responses were from South Asia (53 per cent) and from Southeast Asia (27 per cent), followed by 7 per cent from the Pacific, 7 per cent from multiple subregions and 3 per cent from West Asia. Another 3 per cent of responses had indicated their location in the Asia-Pacific region as "other" (Figure 4.1).

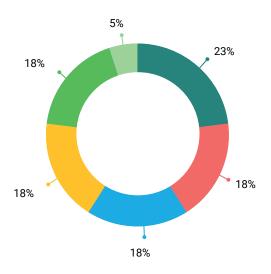
The respondents mostly represented local NGOs (29 per cent of responses), international NGOs (14 per cent) and government ministries (14 per cent). Responses were also submitted from United Nations organisations (11 per cent), intergovernmental organisations (6 per cent), farmers' associations (3 per cent), the scientific and technological community (3 per cent), and other organisations (11 per cent).

Figure 4.2 Scale of the projects



Most of the projects conducted by the respondents' organisations are implemented at national (33 per cent) and local levels (20 per cent) followed by global (18 per cent), subnational (16 per cent) and regional projects (11 per cent). Only 2 per cent of the submitted responses represented projects that were implemented at a multinational level (Figure 4.2).

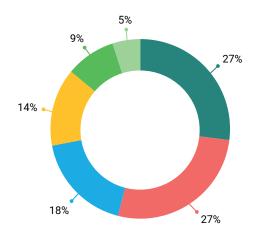
Figure 4.3 Project budgets



- > \$5,000,000
- \$100,000
- \$2,500,000-5,000,000
- \$250,000-500,000
- \$500,000-1,000,000
- \$1,000,0000-2,500,000

In terms of the project size, 23 per cent of projects implemented by the respondents' organisations had a budget above US\$5 million, followed by projects with a budget of US\$2.5 million-5 million (18 per cent), US\$500,000-1 million (18 per cent) and US\$250,000-500,000 (18 per cent). Only 4 per cent of projects had a budget of US\$1 million-2.5 million (Figure 4.3).

Figure 4.4 Expected number of beneficiaries



- 1,000-10,000
- 10,000-100,000
- > 1,000,000
- 100-1,000
- 100,000-1,000,000
- > 100

Most of the projects submitted through the survey aim to reach 1,000–10,000 (27 per cent) and 10,000–100,000 (27 per cent) beneficiaries. Additionally, 18 per cent of projects aim to reach over 1,000,000, with 14 per cent of projects targeting 100–1,000 beneficiaries, 9 per cent 100,000–1,000,000 beneficiaries, and 5 per cent less than 100 beneficiaries (Figure 4.4).



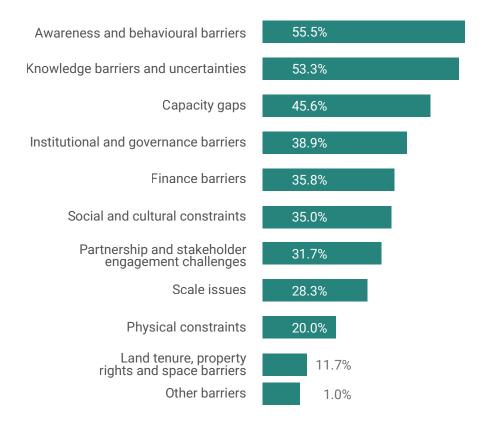
The ecosystems in which the submitted projects are implemented are mainly agricultural land (18 per cent), forests (14 per cent) and coastal zones (12 per cent). Other ecosystems include freshwater ecosystems (9 per cent), mangroves (7 per cent), mountains (7 per cent), urban areas (6 per cent), wetlands (6 per cent), grasslands (6 per cent), scrublands (5 per cent) and oceans (4 per cent). In addition, projects were implemented in peatlands (1 per cent), savannahs (1 per cent) and other ecosystems (4 per cent).

In terms of the sectors the projects are targeting, most of the projects focus on ecosystems, forestry and biodiversity (24.2 per cent), and agriculture and food security (15.9 per cent), followed by disaster risk reduction (8.8 per cent), socioeconomic activities (7.5 per cent), water resources (7.5 per cent) and gender (5.7 per cent). Other sectors include coastal areas (4.8 per cent), energy (4 per cent), indigenous and traditional knowledge (4 per cent), health (3.5 per cent), infrastructure (3.1 per cent), urban resilience (3.1 per cent), human settlement (1.8 per cent), tourism (1.8 per cent), adaptation finance (1.3 per cent), and immigration and displacement (1.3 per cent).

### 4.2 Barriers to EbA

## 4.2.1 Most common barriers identified by the respondents

Figure 4.5 Most common barriers identified by the respondents (percentage of respondents

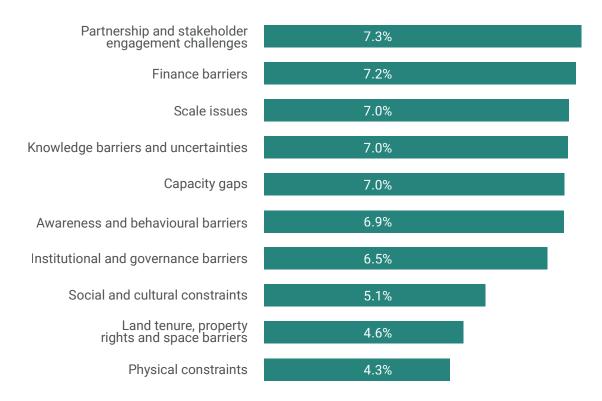


The subcategories of barriers that respondents faced most in the region are awareness and behavioural barriers (55 per cent of responses), knowledge barriers and uncertainties (53.3 per cent), and capacity gaps (45.6 per cent) (Figure 4.5).

Other key barriers highlighted by the survey are institutional and governance challenges (38.9 per cent), finance barriers (35.8 per cent), social and cultural constraints (35 per cent), partnership and stakeholder engagement challenges (31.7 per cent), scale issues (28.3 per cent), and physical constraints (20 per cent). Land tenure, property ownership and space barriers were faced by 11.7 per cent of respondents, and 10 per cent faced other barriers besides those identified for the survey.

# 4.2.2 Most important barriers to overcome

Figure 4.6 Most important barriers to overcome identified by the respondents (percentage of respondents)



When ranking the different barriers, the respondents were able to choose between five different levels of importance. To calculate the different percentages and rank the barriers considering, a coefficient was allocated to each of these categories, with: Very important: 1; Important: 0.75; Moderately important: 0.5; Slightly important: 0.25; Not important: -1. This coefficient system allowed for analysis of all different answers, leading to a ranking that reflects the views shared by the practitioners and experts who took the survey.

Based on the responses, the subcategories of barriers identified as most important to overcome are those related to partnerships and stakeholder engagement, with 73.4 per cent of the respondents agreeing that these are important barriers to overcome, followed by finance barriers (71.9 per cent), scale issues (70.4 per cent), and knowledge barriers and uncertainties

(70.3 per cent). Other important barriers include capacity gaps (69.5 per cent), awareness and behavioural barriers (69.2 per cent), and institutional and governance challenges (65.1 per cent) (Figure 4.6). In addition, social and cultural constraints (50.9 per cent), land tenure, property ownership and space barriers (45.9 per cent), and physical constraints (42.5 per cent) were also identified as important barriers to overcome in order to scale up EbA.

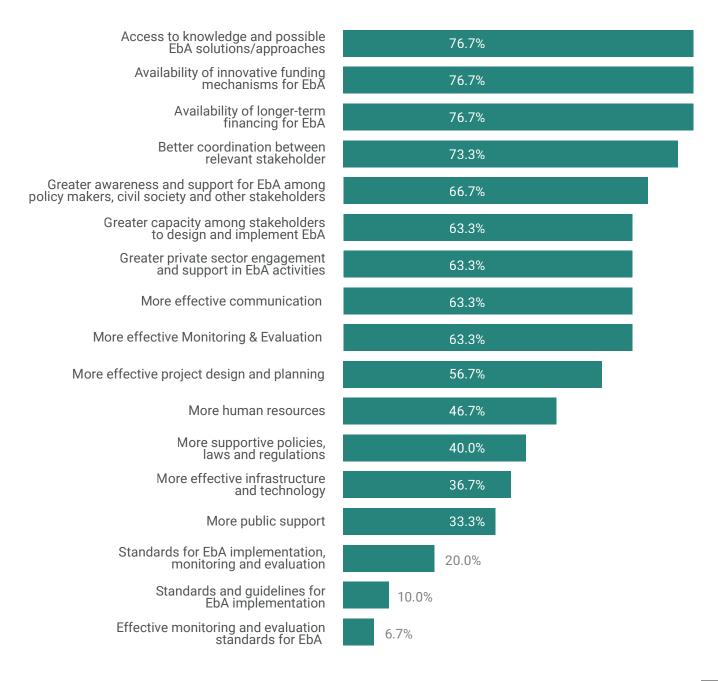
## 4.3 Overcoming barriers

### 4.3.1 Solutions collected from the survey

To overcome the different barriers to EbA, most survey respondents suggested improving the access to knowledge on possible EbA solutions and approaches, the availability of innovative funding mechanisms for EbA, and the availability of longer-term financing (76.7 per cent of responses highlighted all three

activities) (Figure 4.7). In addition, better coordination between relevant stakeholders (73.3 per cent), greater awareness and support for EbA among policymakers, civil society and other stakeholders (66.7 per cent), greater private sector engagement and support in EbA activities (63.3 per cent), and more effective communication (63.3 per cent) and monitoring and evaluation (63.3 per cent) were also suggested as key activities to overcome barriers for scaling up EbA (Figure 4.7).

Figure 4.7 Ranking of potentially useful activities to overcome barriers to EbA identified by the respondents (percentage of respondents)



# 4.3.2 Solutions collected from the dialogues

Based on the discussions and inputs collected during the Asia-Pacific regional stakeholder dialogues in 2021, the following solutions were suggested by the participants to overcome barriers related to knowledge and understanding, governance and policy challenges, and limited access to finance.

# 1. Proposed solutions to lack of knowledge and understanding:

- Build EbA knowledge base through multi- and cross-disciplinary research. Long-term research and data are needed to properly show trends and effectiveness of EbA interventions.
- Raise awareness on and communicate the great value of nature to the public and local communities through awareness campaigns, workshops and national education systems. It is important to tailor language that local communities understand.
- Train and build capacity in local communities through tailored training programmes and workshops. For instance, local communities can be trained to protect nature and diversify income streams through sustainable livelihoods (e.g. forestry or ecotourism).
- Raise awareness and communicate the value of nature and natural capital to policymakers. It is important to show clear examples and clearly communicate the benefits of EbA and ecosystem services.
- Integrate traditional and local knowledge into decision-making.
- Engage local communities and stakeholders across sectors to ensure ownership and participation.

# 2. Proposed solutions to governance and policy challenges:

- Exercise participatory policymaking and ensure the engagement and involvement of communities in policymaking throughout the policy process (e.g. national policies, National Adaptation Plans [NAPs] and nationally determined contributions [NDCs]).
- Integrate indigenous and local knowledge into policy processes.
- Evidence-based communications and targeted communications of the cost-effectiveness of EbA to policymakers across governments and ministries.
- Provide support to mainstreaming EbA into planning and processes (including NAPs and NDCs).
- Monitor policies and gather and use data to incorporate new trends into policies.
- Bring EbA and nature conservation into policies across scales (from local administrative units to national level).
- Build on and scale up successful pilot project and tailor projects for local contexts.
- Build dialogues between different levels of governance to align their strategies and visions.
- Increase focus on implementation and capacitybuilding.

#### 3. Proposed solutions to limited access to finance:

- Ensure adaptation finance is available to vulnerable groups and communities.
- Explore PES approaches as part of EbA projects.
- Utilize contextualized financial mechanisms (e.g. green bonds) to incentivize investments in nature and EbA.



- Promote locally led financing mechanisms
   (e.g. revolving funds, locally governed funds, participatory local budgeting) to identify local opportunities to direct funds towards adaptation and EbA.
- Strengthen the engagement and financing from the private sector on EbA. Insurance companies are important stakeholders, e.g. in valuing cost-benefits of EbA.
- Demonstrate a return on investment of EbA to encourage financial flows towards EbA.
- Global banks play a key role in integrating naturebased solutions and EbA into plans and loans.
   Building on the opportunities provided by global adaptation financing is key.
- Find ways to use publicly available funds more effectively (e.g. adjusting subsidies).
- · Promote blue and green infrastructure financing.

# 4.3.3 Innovative solutions for overcoming barriers

Fishing for Climate Resilience: Empowering Fishing Communities to Adopt Ecosystem-Based Adaptation Measures for Securing Food and Livelihoods<sup>7</sup>

#### Implementing agency/organisation:

Rare

#### Fund:

International Climate Initiative (BMU-IKI), German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

#### Location:

Federated States of Micronesia, Indonesia, Marshall Islands, Palau, Philippines

#### **Project description:**

This project aims to build the resilience of vulnerable, small-scale fishing communities to climate change through the integration of EbA solutions in community resource management practices, policies and plans. The project empowers small-scale fishers and their communities to work with governments and other stakeholders to decide how their waters and natural resources should be sustainably managed to enhance socioeconomic and ecological resilience to climate change.

Climate science, fisheries data and local knowledge are used to design and establish 'managed access fishing grounds' and marine reserves that anticipate changes in primary marine habitats and fisheries species due to climate change. Marine reserves are areas where fishing activities are prohibited to allow fish stock to replenish, while managed access fishing grounds are areas where groups of small-scale fishers have the right to fish in exchange for improved fishing practices.

#### Innovative solution and lessons learned:

A range of behavioural insights-based tools and social marketing techniques are used to motivate fishers to collectively adopt and enforce sustainable fishing practices and organise themselves into management groups. Further, the project works with local and national policymakers to build an enabling policy environment for the adoption and promotion of EbA in the small-scale fisheries sector. It uses experiences and lessons learned to elevate the importance of EbA in the fisheries sector to the level of global climate discussions. This suite of integrated EbA solutions ensures that human needs and the protection of resources are linked as part of an overall strategy for helping people adapt to climate change.

Catalysing Ecosystem Restoration for Climate Resilient Natural Capital and Rural Livelihoods in Nepal (EbA II)

#### Implementing agency/organisation:

Government of Nepal, <u>Ministry of Forests and</u>
<u>Environment</u>

<sup>7.</sup> Project information provided in 2021.

#### Fund:

Least Developed Countries Fund (GEF)

#### Project description:

This project is increasing the capacity of the Nepalese government and local communities to use EbA to adapt to climate change in forests and rangelands in mid-hill and high mountain areas. The project's main approaches include restoring forests and rangeland ecosystems, strengthening the technical capacity of Nepal's institutions to implement EbA, mainstreaming EbA into national policy, constructing infrastructure for water conservation, and introducing alternative climateresilient livelihoods.

The project is restoring degraded forests and rangelands as they protect communities and crops from drought by retaining moisture in the soil, which also binds the soil together, holding back soil erosion caused by intense rainfall. The restoration process is executed by choosing indigenous tree and grass species that are climate resilient and provide benefits to indigenous and local communities (e.g. medicines).

The project is also establishing tree nurseries and terraces to support restoration activities. Terracing is an agricultural technique that reshapes the land into a series of level or gently sloping platforms to slow the movement of water on the soil surface, thus reducing soil erosion and increasing the amount of water available for crops.

To complement EbA measures, the project is building infrastructure to conserve and store water (including filtering dams, water conservation ponds and community rainwater harvesting devices), and providing training for national and district officials in implementing EbA, while producing an EbA upscaling and financing plan. Furthermore, national awareness campaigns are being organised across a wide spectrum of audiences, from those working at policy level to schoolchildren, to generate awareness of EbA. Activities include a radio programme, magazine articles, and educational tools used by government institutions to integrate EbA into educational programmes and

national planning.

#### Innovative solutions and lessons learned:

Traditional knowledge, coupled with scientific research, is being used to develop an integrated suite of adaptation interventions to restore forests and rangelands, improve livestock management, reduce soil erosion, and develop additional livelihood options from forests, rangelands and agro-ecosystems.

These interventions are enhancing the capacity of the ecosystems to provide important goods and services to indigenous and local communities. In doing so, these ecosystems are providing a buffer from extreme weather events and temperature increases, improving communities' resilience to climate change. You can learn more about the project here.

**Effective Management and Sustainable Financing of Coral Reef Marine Protected Areas in the Philippines**8

#### Implementing agency/organisation:

Blue Finance

#### Fund:

Global EbA Fund

#### **Project description:**

As part of the upscaling effort of a 10-year EbA initiative, this project will build a portfolio of investmentready businesses and projects to support the building of climate-resilient livelihoods for communities living near marine protected area (MPA) networks in the Philippines Verde Island Passage and Calamian Islands. The project will generate investment incentives through a blue economy investment facility. By strengthening food security and incomes for coastal communities and supporting more vibrant coral reefs, the project will benefit 65 MPAs and 76,000 hectares of coral reef and marine biodiversity ecosystems, with an estimated 1,800,000 direct and indirect beneficiaries. By building the capacity of civil society and government to collaborate with the private sector on future EbA initiatives, and documenting these case studies, this project will also contribute to building the evidence base to increase the potential of private sector investment in EbA.

This project received a US\$222,560 grant from the Global EbA Fund.

You can learn more about the project here.

#### Additional examples:

- Pakistan's <u>Ten Billion Tree Tsunami project</u> is a large scale forest landscape restoration project, creating jobs, embedded within policies, and providing humans and biodiversity benefits.
- Thai-German Climate Programme on Water is introducing climate-resilient river basin planning and EbA to the water sector, as well as climate finance and communication.
- Mhe Mekong delta management in Viet Nam project is moving seawalls further inland to enable mangrove restoration, and ensuring hydrology management to provide sediments and water to the Delta.

# 4.4 Sustainability, replicability and scalability

### 4.4.1 Sustainability

Among the respondents who already completed their projects (47 per cent), 46 per cent stated that activities were sustained after project completion. The respondents highlighted the importance of whole community involvement (including women and youth) and stakeholder engagement throughout the project cycle to ensure the sustainability of the initiatives.

#### 4.4.2 Replicability

Among the respondents whose project was already completed (47 per cent), 57 per cent indicated their activities have been replicated. This was mostly done through knowledge transfer, such as sharing project outcomes, innovative approaches or lessons learned between communities or partner organisations.

For example, lessons from the Watershed Organisation Trust's (WOTR) climate adaptation project in India – which sought to develop the knowledge, strategies, and processes that enable vulnerable communities to adapt to impending climate change impacts – were adopted by WOTR across many other villages and projects within Maharashtra and other states.

#### 4.4.3 Scalability

All the respondents consider their projects to be scalable; however, only 27 per cent of the submitted projects were reported to have been scaled up. The respondents stated that one of the key challenges in scaling up projects is the fact that many approaches are designed for a specific context or locale, making implementation on a wider scale challenging.

In the survey responses, working across sectors and engaging and empowering local communities, while also influencing policy, and working across levels from the local to the regional and international, were highlighted as key factors in scaling up EbA initiatives in the region.



# What is the Global EbA Fund?

This stakeholder dialogue process was organised in the context of the <u>Global EbA Fund</u>, a quickly deployable mechanism for supporting innovative approaches to EbA to climate change.

The Fund is structured to support catalytic initiatives to help to overcome identified barriers to upscaling EbA. The Fund fills resourcing and knowledge gaps with a broad thematic focus on innovation and urgency, thus encouraging creative solutions and partnerships among funding applicants and the wider EbA community. By supporting catalytic interventions, the Fund addresses research gaps, pilots innovative EbA approaches, engages in strategic EbA policy mainstreaming, and incentivizes innovative finance mechanisms and private sector EbA investment.

The Global EbA Fund is co-implemented by IUCN and UNEP, and funded by the International Climate Initiative (IKI) of Germany. IUCN and UNEP support target countries and territories in implementing EbA measures to meet their global plans and commitments, and to help people to adapt to the adverse effects of climate change.

IKI originally committed €20 million to the Fund, with an expansion in November 2021 during COP26, where <u>BMU</u> announced it would provide an additional €10 million, taking IKI's total commitment to the Fund up to €30 million.

## How to apply

The Global EbA Fund accepts and reviews <u>concept</u> <u>stage application packet</u> submissions year-round, and will make biannual funding decisions. The latest information on upcoming application deadlines and announcements of funding cohorts is published on the <u>Global EbA Fund announcement webpage</u>.

You can find out more about the grantees here.

Please visit the Global EbA Fund website for more details on <u>how to apply</u>, or, for more information, contact <u>contact.ebafund@iucn.org</u>.

# Implications of the stakeholder dialogue process for the Global EbA Fund

In total, out of the 108 respondents:

- 70.4 per cent stated they were not aware of the Fund before answering the survey
- 94.4 per cent stated they had not yet applied for a grant
- 96.3 per cent indicated they were interested in applying for a grant

During the stakeholder dialogues, the Fund was introduced, and participants were encouraged to ask questions about the Fund and the application process.

Through this participatory process, regional networks were mobilized to present and promote the Fund and its purpose, and to answer any questions on the application process, which greatly contributed to receiving over one thousand applications in the Fund's first three application cycles.

This has, therefore, been an important way to promote and inform potential applicants about the Fund, especially in reaching more stakeholders and attracting more applicants.

# 6. Conclusions and Recommendations



# 1. EbA projects and regional differences

As described throughout this report, EbA actions are diverse and complex. EbA actions combine many different approaches and sectors, highlighting its potential to be implemented in various contexts, geographies and sectors to build resilience to climate change.

Based on the information gathered in this report, the most common EbA projects are initiatives working on the restoration or conservation of different ecosystems and biodiversity, often led by a local NGO, with a budget of US\$250,000 or less, aiming to benefit 10,000 people or less, with a focus on coastal communities, youth, women, indigenous people and farmers.

While EbA projects and approaches varied between and within the regions where the survey was conducted, it is possible to observe similarities and differences between the different projects across regions.

#### Similarities and differences among regions

In all three surveyed regions, local and national NGOs are the main implementers of EbA projects. But in each region, different types of actors are also leading EbA interventions, such as farmers' associations in Africa, government ministries in Asia and the Pacific, and local authorities in LAC.

Most projects in the different regions are implemented at the local and national levels, with LAC and Asia and the Pacific having a larger representation of global projects.

While projects are, in most cases, implemented at the same level, there are disparities in terms of budget and number of beneficiaries between the three regions. In

terms of budget, in Africa, a large majority (80 per cent) of projects have a budget of less than US\$250,000, and only 5 per cent of projects have a budget of over US\$5 million. In comparison, in Asia-Pacific, the majority of projects have a budget of over US\$500,000, and 23 per cent have a budget of over US\$5 million.

We can observe similar results in terms of the number of expected beneficiaries. In LAC and Africa, the majority of projects plan to reach, on average, less than 10,000 people, with 81 per cent for LAC and 64 per cent for Africa. In comparison, a majority of projects implemented in Asia-Pacific (54 per cent) aim to benefit, on average, more than 10,000 people.

These differences may be due to the number of global projects taking place in the Asia-Pacific and LAC regions, as they generally have a larger budget to implement their activities in several countries.

When it comes to the types of beneficiaries of these projects, across all three regions, they are mainly rural populations, coastal communities and farmers' associations. Projects also target indigenous communities and youth, particularly in Africa and Asia-Pacific. Women's groups are also main beneficiaries of projects in Asia-Pacific, but are less represented in Africa and LAC. One of the least targeted categories of stakeholders is the private sector, including international companies as well as local companies, highlighting the need for facilitating the engagement with private sector actors on EbA and climate adaptation more generally.

Finally, in all three regions, the majority of projects tend to focus on ecosystems, biodiversity and forestry. Other important sectors are agriculture and food security, particularly in Africa and Asia-Pacific, and disaster and risk reduction in Asia-Pacific and LAC. It can also be observed that the least targeted sectors are transport, immigration and human settlement, and heavy industry. Infrastructure is also a sector that is not targeted by a large number of projects in each region.

# 2. Barriers and regional differences

While the implementation of adaptation measures continues to make progress around the world, many barriers remain that limit this progress for practitioners. As discussed earlier in this report, the main challenges practitioners and organisations face when implementing EbA actions include financial barriers, such as the lack of financial incentives and business models for the private sector to invest in EbA, and difficulties in accessing long-term sustainable finance for EbA implementation, maintenance and monitoring.

This corroborates some of the points made in the Adaptation Gap Report 2021, which states "there is an urgent need to scale up climate adaptation finance, including public and private adaptation finance. However, the funds needed to implement adaptation plans are still far from reaching the desired level."

However, practitioners do not only face financial barriers. Limited knowledge or understanding of EbA and its value for climate change adaptation including the lack of confidence among policymakers, practitioners and planners in the ability of EbA to provide adaptation benefits - also makes it more difficult to implement such actions.

Practitioners also face challenges regarding partnerships and stakeholder engagement, such as those related to building cross-sectoral, multistakeholder coalitions and collaboration between government agencies, ministries and departments. There is a need for engaging all relevant ministries for promoting cross-sectoral collaboration and policy coherence on climate change adaptation, including EbA. Policy processes, such as the National Adaptation Plan process, can help in coordinating cross-sectoral linkages when integrating climate change adaptation and EbA into national decision-making processes.

And, although the results show there are many similarities between the different regions, some challenges are still more prevalent in certain parts of the world.

While financial barriers are the most important challenge in Africa, in LAC other challenges that influence EbA implementation and upscaling include capacity gaps and the long time frame for adaptation benefits to be realized.

Conversely, two of the most important subcategories of barriers in Africa identified by the survey - challenges related to partnerships and stakeholder engagement and barriers related to land tenure, ownership and space - represent only a fraction of the challenges faced by practitioners in LAC.

In Asia-Pacific, the results of the survey indicate that practitioners identify challenges related to partnerships and stakeholder engagement as the most important, followed by finance, scale issues and knowledge barriers.

These results show that most barriers are specific to the regional – and even national and local – context of the area where an EbA action is being implemented. Whether it is political and social constraints, geographical barriers, or financial and economic issues, all barriers need to be analysed and addressed through a series of regional, national and local lenses. This is vital for holistically understanding the main drivers of these barriers, and how to effectively scale up the practice.

Another important barrier identified in the Adaptation Gap Report 2021 is the "low rate of monitoring and evaluation systems: only 26 per cent of countries have such a system in place". This was confirmed by many respondents, who expressed that monitoring, evaluation and learning is an essential component of the implementation of any EbA project.

Women, who are important agents of social change, also tend to face more social barriers than men, and therefore need to be better involved in the development and management of EbA projects. It is crucial that when discussing and planning projects, women are leading and holding decision-making roles in the projects alongside men. Too often, it is assumed that merely

having women participate is enough.

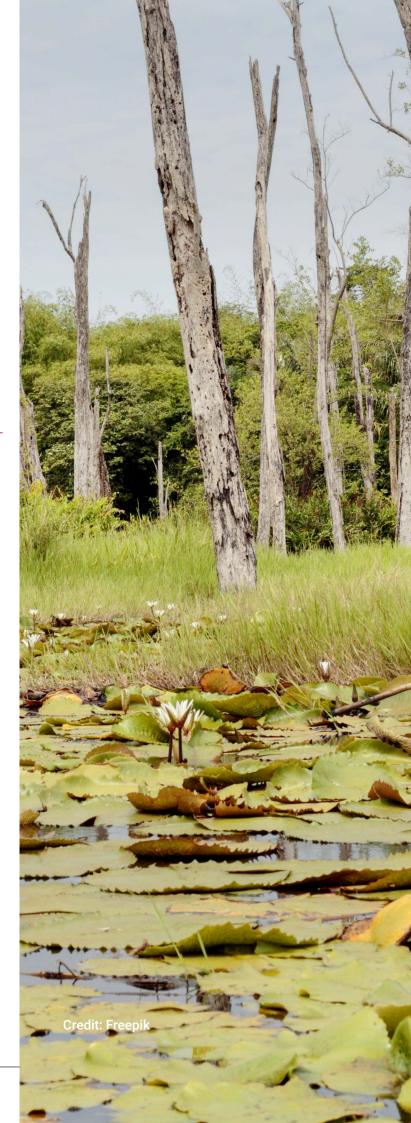
According to the respodentns, the most important barriers to overcome are not necessarily the most common. More than half of respondents faced barriers relating to awareness and behaviour (51.43 per cent), making it the most common subcategory globally. However, this subcategory was only ranked third by respondents when assessing the most important barriers to overcome. In contrast, financial barriers, identified as the most important subcategory of barriers to overcome, was only encountered by 41 per cent of respondents.

## 3. Overcoming barriers

Identifying barriers to EbA is the first step to upscaling the approach. Subsequently, efforts should be made to see how these barriers can be addressed using innovative solutions and approaches.

It is vital to consider national, regional and local specificities and contexts when analysing the barriers to EbA and the potential solutions to overcome these barriers. Indeed, the results of the survey indicate that EbA solutions take many forms and approaches, such as improving the access to knowledge and EbA solutions, or finding new innovative funding mechanisms and longer-term financing specific to EbA (72.6 per cent). However, this does not prevent the creation and implementation of common solutions or specific solutions that can be adjusted and replicated in other contexts.

During the stakeholder dialogue process, many solutions to these challenges were suggested and discussed by participating practitioners and experts.



In all three regions, respondents identified the following solutions for overcoming these challenges: increasing the availability of innovative financing mechanisms and longer-term financing specific to EbA (see Figure 3); improving the access to knowledge about EbA and possible solutions; increasing the awareness of EbA among policymakers, civil society and other stakeholders; and improving the efficiency of project design and planning.

This includes increasing the knowledge available on the different benefits of EbA, or ensuring that investors and governments are better able to understand the risks of climate change and the potential costs of inaction for the future. This will help increase the political will from governments and the financial support from both public and private investors.

To attract this support, it is crucial to leverage enablers outside of the traditional EbA silo to drive market-driven upscaling of EbA. Some of these enablers include: complementing EbA with clean and renewable energy, especially in the context of the agro-value chain, to drive the creation of income and market-driven investments in scaling EbA; innovative financing through leveraging locally accessible, low-risk financial structures like cooperatives; and policy innovations through data feedback on what has been proven to work on the ground.

Other solutions include the repackaging and dissemination of actionable knowledge to primary users to increase their understanding of what is needed and what they can start implementing. This expands into the creation of new curricula and courses in education systems, specific to climate change and climate adaptation.

Finally, as explained above, it is crucial to improve and strengthen the monitoring, evaluation and learning component of any EbA project, especially to develop projects that are sustainable in the longer term.

Some solutions put forward by participants had innovative components. For example, when asked specifically how to overcome barriers to knowledge, some respondents from LAC suggested increasing knowledge available on platforms with gamification

techniques (such as social networks, apps and video games) and organising advertising campaigns with celebrities from the region.

Regarding the lack of political and public leadership and support for EbA, participants recommended launching community pride campaigns, or even creating a new Nobel Prize for EbA.

This shows there many possibilities in terms of the types of solutions that can be developed, and that with creativity and willpower, the EbA obstacles can be overcome.

Before developing new solutions, it is important to consider those that already exist, and investigate ways to build on them, make them more available, and replicate them elsewhere.

# 4. Existing actionable solutions

While many solutions are only at the concept stage and still need to be developed, many solutions are already out there, and need to be considered by more practitioners, civil society, governments and investors.

For example, the Global EbA Fund can help overcome some of the financial barriers identified by the respondents. Other barriers, such as awareness and knowledge barriers, can be overcome by initiatives such as the Lima Adaptation Knowledge Initiative, which helps to prioritize adaptation knowledge gaps and catalyse actions to close these gaps. Further resources specific to EbA can be found as part of the EbA Tools Navigator. Partnerships and stakeholder engagement barriers can be overcome by the work of networks aiming to make connections and partnerships possible, exemplified by the Friends of EbA (FEBA) Network or the Global Adaptation Network.

These are just a few examples, but many other initiatives, programmes, mechanisms and tools exist. Some are country-specific, some are global, some target specific ecosystems or specific beneficiaries, but all can contribute to overcome barriers and scale up EbA.

**Final remarks** 

Overall, there has been an increase in the implementation of EbA actions and support from public and private actors. This can be observed through new National Adaptation Plans established by a growing number of countries.

However, many barriers remain and need to be overcome in order to successfully scale up the use and implementation of EbA worldwide. All actors, from governments to the private sector, must contribute to overcoming these barriers.

Evidence on the impacts and effectiveness of EbA is also needed to gain the support of local communities, governments and investors. During this process, many practitioners emphasised the need for an initial smallscale demonstration (i.e. pilot) of the solution they are implementing to provide sufficient evidence, showcase the numerous benefits of the solution, and receive sufficient support to scale up and replicate the solution elsewhere.

When a solution is replicated, it is crucial to adapt it to local specificities and contexts in a participatory manner.

EbA projects should be implemented by a wider range of actors, not just local or national NGOs. More initiatives should emerge from marginalised groups, such as women's groups, indigenous people or youth, but also from non-traditional actors, such as faith-based organisations or the private sector. To do so, EbA projects need to be better incentivised, supported and guided.

While there are still important financial, knowledge, institutitional, capacity and other gaps to address, which act as barriers to the uptake and implementation of EbA, many solutions already exist, and many more are being developed. With these solutions, it will be possible to scale up EbA and help communities around the globe adapt to the adverse effects of climate change.

# **Ecosystem-based Adaptation**

Stakeholder Dialogue Report













